STATE OF UTAH

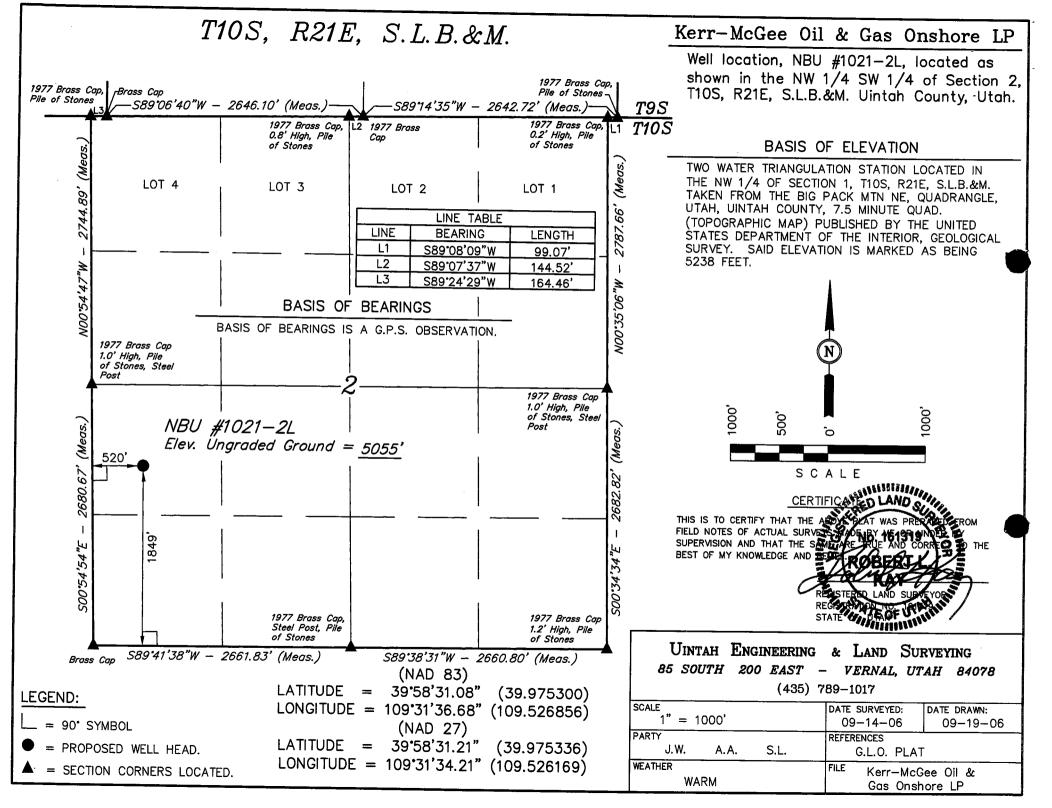
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

	ΛЛ	

AMENDED REPORT

(highlight changes)

		APPLICA	TION FOR I	PERMIT TO	DRILL		5. MINERAL LEASE NO: ML-22652	6. SURFACE: State		
1A. TYPE OF WO	rk: D	7. IF INDIAN, ALLOTTEE OF	R TRIBE NAME:							
B. TYPE OF WE	ll: OIL 🗌	GAS 🗹	OTHER	SIN	GLE ZONE MULTIPLE ZO	NE 🚺	8. UNIT OF CA AGREEMENT UNIT #89100890			
2. NAME OF OPE							9. WELL NAME and NUMBE			
3. ADDRESS OF		GAS ONSH	ORE L.P.		PHONE NUMBER:		NBU 1022-2L	VII DCAT:		
1368 S 120	0 E	CITY VER		E UT ZIP 840	078 (435) 781-702	4	NATURAL BUTT			
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 1849'FSL, 520'FWL AT PROPOSED PRODUCING ZONE: 4. LOCATION OF WELL (FOOTAGES) 5. LOCATION OF WELL (FOOTAGES) 5. LOCATION OF WELL (FOOTAGES) 6.										
					2019-61102					
		ECTION FROM NEA I OF OURA	AREST TOWN OR POS	ST OFFICE:			12. COUNTY:	13. STATE: UTAH		
		PERTY OR LEASE		16. NUMBER O	F ACRES IN LEASE:	17. N	UINTAH UMBER OF ACRES ASSIGNEI	D TO THIS WELL:		
520'					489.92			40.00		
	NEAREST WEL R) ON THIS LEAS	L (DRILLING, COM E (FEET)	PLETED, OR	19. PROPOSED	DEPTH:	20. B	OND DESCRIPTION:			
REFER TO	O TOPO C				9,400		LB0005237			
5055'GL	(SHOW WHETH	ER DF, RT, GR, ET	C.):	22. APPROXIMA	ATE DATE WORK WILL START:	23. E	STIMATED DURATION:			
				. <u> </u>				····		
24.			PROPOS	ED CASING A	ND CEMENTING PROGRAM	Л				
SIZE OF HOLE	CASING SIZE	, GRADE, AND WE	GHT PER FOOT	SETTING DEPTH	CEMENT TYPE, C	QUANTITY	, YIELD, AND SLURRY WEIGH	т		
12 1/4"	9 5/8	H-40	32.3#	2,200	265 SX CLASS G	1.18	/IELD 15.6 PP	G		
7 7/8"	4 1/2	1-80	11.6#	9,400	1930 SX 50/50 POZ	1.31	/IELD 14.3 PP	G		
25.				ATTA	CHMENTS					
VERIFY THE FOL	LOWING ARE AT	TACHED IN ACCO	RDANCE WITH THE U	TAH OIL AND GAS C	ONSERVATION GENERAL RULES:			<u></u>		
✓ WELL PL			ED SURVEYOR OR E	JONEED	COMPLETE DRILLING PLA	.,				
			S APPROVAL FOR USE							
EVIDENC	SE OF DIVISION C	DE WATER RIGHTS	S AFFROVAL FOR US	OF WATER	FORM 5, IF OPERATOR IS	PERSON	OR COMPANY OTHER THAN	THE LEASE OWNER		
NAME (PLEASE	PRINT) SHEII	LA UPCHE	30		TITLE REGULATO	RY AN	IALYST			
SIGNATURE /	////	UM-	MAR	and the second	DATE 11/7/2006					
(This space for Sta	ite use only)			An						
, speed tot die			V	Üt	proved by the ah Division of	1156	CEIVED			
	,	12 0110	20011	Oil,	Gas and Mining	NOV	1 3 2006			
API NUMBER AS	SIGNED:	13-047-	18843		APPROVAL:	65.00	OAO O EHEURIA			
				Date: (02-14-220 EW	OF OII	L, GAS & MINING			
(11/2001)				(See Instruction	ons on Reverse Side					



NBU 1021-2L NWSW SEC. 2, T10S, R21E UINTAH COUNTY, UTAH ML-22652

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. <u>Estimated Tops of Important Geologic Markers:</u>

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1322'
Top of Birds Nest Water	1586'
Mahogany	2240'
Wasatch	4567'
Mesaverde	7349'
MVU2	8264'
MVL1	8859'
TD	9400'

2. <u>Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:</u>

Substance	<u>Formation</u>	<u>Depth</u>
	Green River	1322'
Water	Top of Birds Nest Water	1586'
	Mahogany	2240'
Gas	Wasatch	4567'
Gas	Mesaverde	7349'
Gas	MVU2	8264'
Gas	MVL1	8859'
Water	N/A	
Other Minerals	N/A	

3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please refer to the attached Drilling Program.

4. Proposed Casing & Cementing Program:

Please refer to the attached Drilling Program.

5. <u>Drilling Fluids Program</u>:

Please refer to the attached Drilling Program.

6. <u>Evaluation Program</u>:

Please refer to the attached Drilling Program.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 9400' TD, approximately equals 5828 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3760 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. <u>Anticipated Starting Dates:</u>

Drilling is planned to commence immediately upon approval of this application.

9. <u>Variances:</u>

Please refer to the attached Drilling Program.

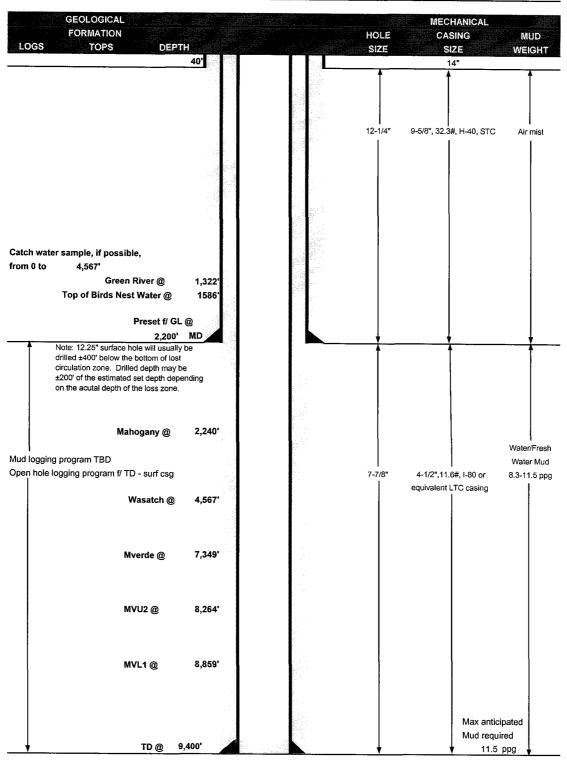
10. Other Information:

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP <u>DRILLING PROGRAM</u>

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP	DATE	Novembe	er 7, 2006		
WELL NAME	NBU 1021-2L	TD	9,400'	MD/TVD		
FIELD Natural But	tes COUNTY Uintah STATE	Utah	ELEVATION	5,055' GL	KB	5,070'
SURFACE LOCATION	NWSW SEC. 2, T10S, R21E 1849'FSL, 520'F	WL			BHL	Straight Hole
	Latitude: 39.975300 Longitude: 109.	526856				
OBJECTIVE ZONE(S)	Wasatch/Mesaverde					
ADDITIONAL INFO	Regulatory Agencies: UDOGM (SURF & MIN	ERALS), BL	M, Tri-County	Health Dept.		





KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

						_			DESIGN FACT	ORS
	SIZE	IN	TERV	AL.	WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"		0-40'							
		f = # # # # # # # # # # # # # # # # # #						2270	1370	254000
SURFACE	9-5/8"	0	to	2200	32.30	H-40	STC	0.64*****	1.33	4.08
							10 July 1877	7780	6350	201000
PRODUCTION	4-1/2"	0	to	9400	11,60	1-80	LTC	2.19	1.13	2.11
								Più	ing saiding	ar Paragraphic Control
					<u></u>					

¹⁾ Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)

(Burst Assumptions: TD = 11.5 ppg)

.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP

3553 psi

Burst SF is low but csg is much stronger than formation at 2000', EMW @ 2000' for 2270# is 21.8 ppg or 1.13 psi/ft

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	Viet e
SURFACE LEAD	*************	Premium cmt + 2% CaCl	215	60%	W.≕IGHT 15,60	1.18
Option 1	333	+ .25 pps flocele	213	00%	15.60	1.18
TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt	50		15.60	
, o, oo, om (i)	200	+ 2% CaCl + .25 pps flocele	50	78.54	15.60	1.18
TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.	****	15.60	1.18
SURFACE		NOTE: If well will circulate water to s	urface, op	tion 2 will t	e utilized	V
Option 2 LEAD	1500	Prem cmt + 16% Gel + 10 pps gilsonite	170	35%	11.00	3.82
		+.25 pps Flocele + 3% salt BWOC	1 (340)	de la		- yw.5.1
TAIL	500	Premium crnt + 2% CaCl	180	35%	15.60	1.18
		+ .25 pps flocele			1.77	
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
					4	و خانی
PRODUCTION LEAD	4,060'	Premium Lite II + 3% KCI + 0.25 pps	440	60%	11.00	3.38
		celloflake + 5 pps gilsonite + 10% gel				
		+ 0.5% extender				
	er j			1474		:
TAIL	5,340'	50/50 Poz/G + 10% salt + 2% gel	1490	60%	14.30	1.31
	1 h	+.1% R-3	L.			ana di

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.								
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.								
		_							

ADDITIONAL INFORMATION

NGINEER:	ms for mud monitoring. If no PVT is available, visual monitoring will be utilitzed.	
	*	
rop Totco survevs every	2000'. Maximum allowable hole angle is 5 degrees.	
lower kelly valves.		
ur sheet. Function test	rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kell	ly to be equipped with upper
OPE: 11" 5M with one a	innular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Re	ecord on chart recorder &
est casing head to 750 p	si after installing. Test surface casing to 1,500 psi prior to drilling out.	

DATE:

DRILLING SUPERINTENDENT:

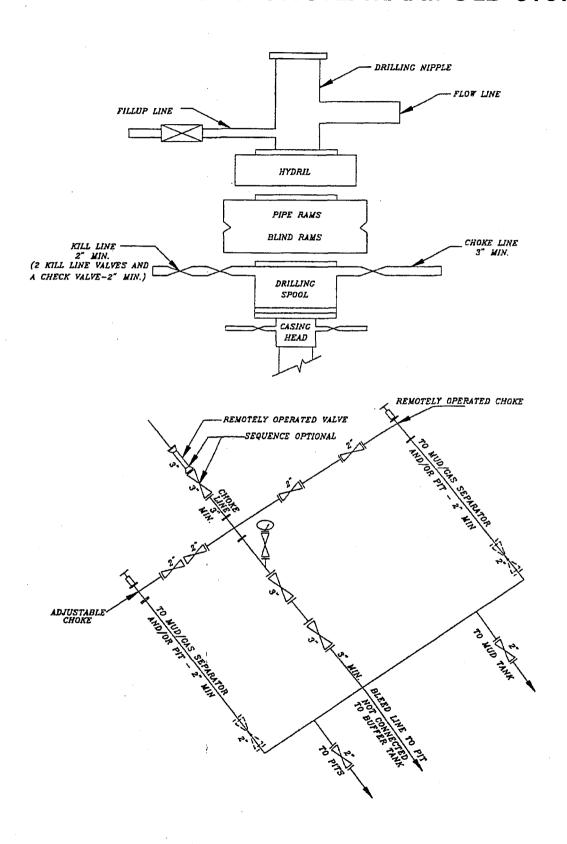
DRILLING

Randy Bayne NBU1021-2L DHD.xls

²⁾ MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

5M BOP STACK and CHOKE MANIFOLD SYSTEM



NBU 1021-2L NWSW SEC. 2, T10S, R21E Uintah County, UT ML-22652

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. Existing Roads:

Refer to Topo Map A for directions to the location.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

Refer to Topo Maps A and B for location of access roads within a 2 mile radius.

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

2. Planned Access Roads:

Approximately 0.2 +/- miles of new access road is proposed. Refer to Topo Map B for the location of the proposed access road.

The upgraded and new portions of the access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet. Appropriate water control will be installed to control erosion.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

Surface disturbance and vehicular traffic will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

3. <u>Location of Existing Wells Within a 1-Mile Radius:</u>

Please refer to Topo Map C.

4. <u>Location of Existing & Proposed Facilities:</u>

The following guidelines will apply if the well is productive.

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain

fluids (i.e., production tanks, produced water tanks, and/or heater/treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required color is Carlsbad Canyon, standard color number 2.5Y 6/2.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Approximately 1164' +/- of 4" pipeline is proposed from the location to an tie-in point. Refer to Topo Map D.

5. <u>Location and Type of Water Supply:</u>

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32, T4S, R3E, Water User Claim #43-8496, Application #53617.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

6. Source of Construction Materials:

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

7. Methods of Handling Waste Materials:

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

A plastic reinforced liner and felt will be used, it will be a minimum of 20 mil thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will

be disposed of in the pit.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

Any produced water from the proposed well will be contained in a water tank and will then be hauled By truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S, R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E.

8. Ancillary Facilities:

None are anticipated.

9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

The reserve pit will be lined, and when the reserve pit is closed, the pit liner will be buried below plow depth.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

The reserve pit fencing will be on three sides during drilling operations, and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Location size may change prior to the drilling of the well due to current rig availability. If the proposed location is not large enough to accommodate the drilling rig the location will be re-surveyed and a Form 9 shall be submitted.

10. Plans for Reclamation of the Surface:

Producing Location:

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

A plastic, nylon reinforced liner will be used, it shall be torn and perforated before backfilling of the reserve pit.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water (s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

Dry Hole/Abandoned Location:

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment of vegetation as specified.

All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. Reseeding operations will be performed after completion of other reclamation operations.

11. <u>Surface Ownership</u>:

SITLA 675 East 500 South, Suite 500 Salt Lake City, UT 84102

12. Other Information:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations, and any applicable Notice of Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

A Class III archaeological survey will be submitted when report becomes available.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

13. <u>Lessee's or Operators's Representative & Certification:</u>

Sheila Upchego Regulatory Analyst Kerr-McGee Oil & Gas Onshore LP 1368 South 1200 East. Vernal, UT 84078 (435) 781-7024 Randy Bayne Drilling Manager Kerr-McGee Oil & Gas Onshore LP 1368 South 1200 East Vernal, UT 84078 (435)781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond #RLB0005237.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Sheila Upchego

11/7/2006

Date

Kerr-McGee Oil & Gas Onshore LP NBU #1021-2L SECTION 2, T10S, R21E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 6.9 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 5.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 2.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN A NORTHEASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 0.7 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE WEST; FOLLOW ROAD FLAGS IN A WESTERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 46.5 MILES.

Kerr-McGee Oil & Gas Onshore LP

NBU #1021-2L

LOCATED IN UINTAH COUNTY, UTAH **SECTION 2, T10S, R21E, S.L.B.&M.**

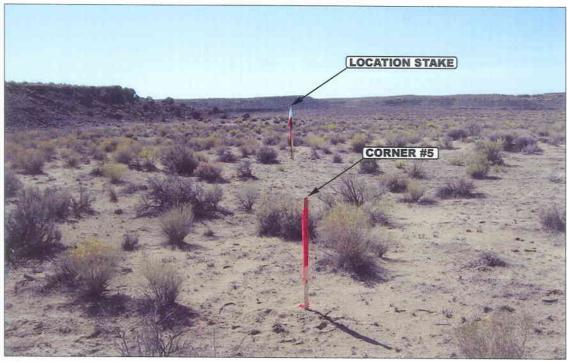


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: WESTERLY

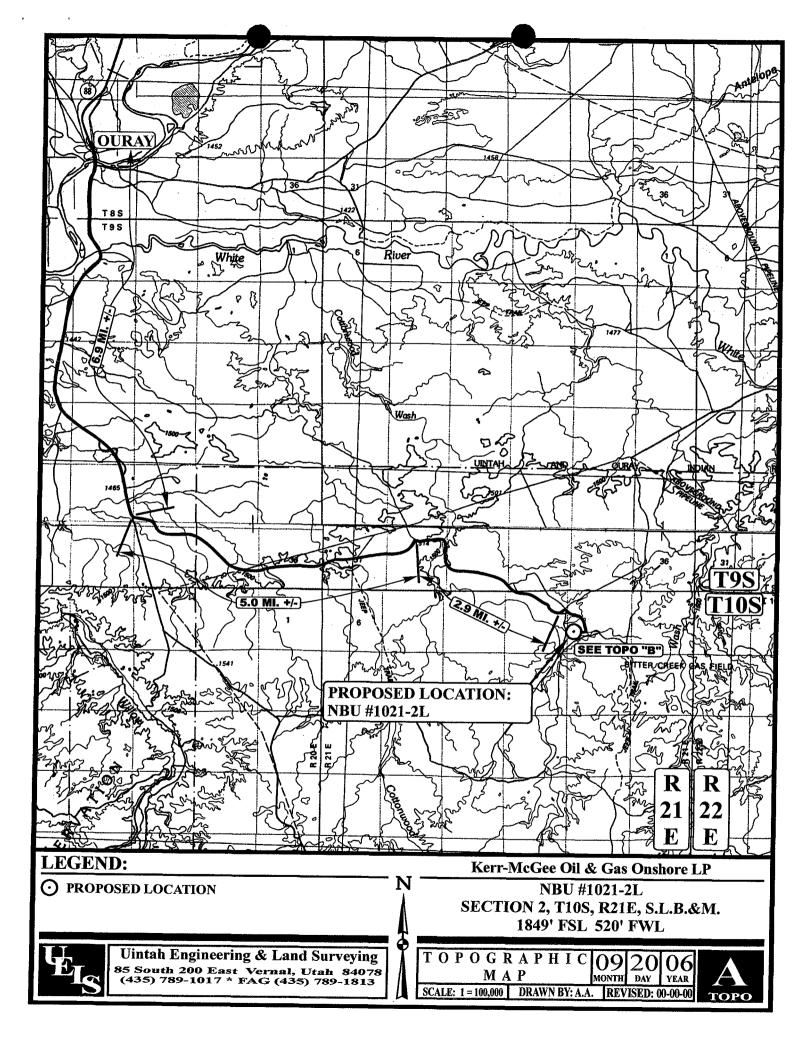


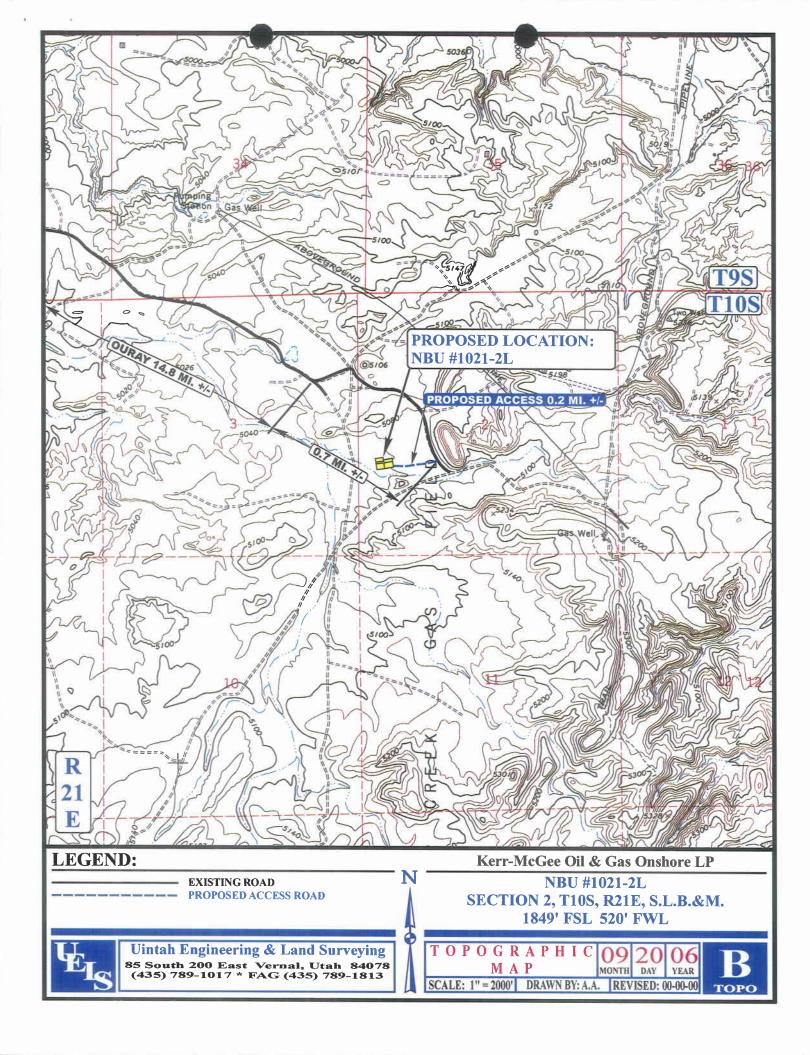
Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

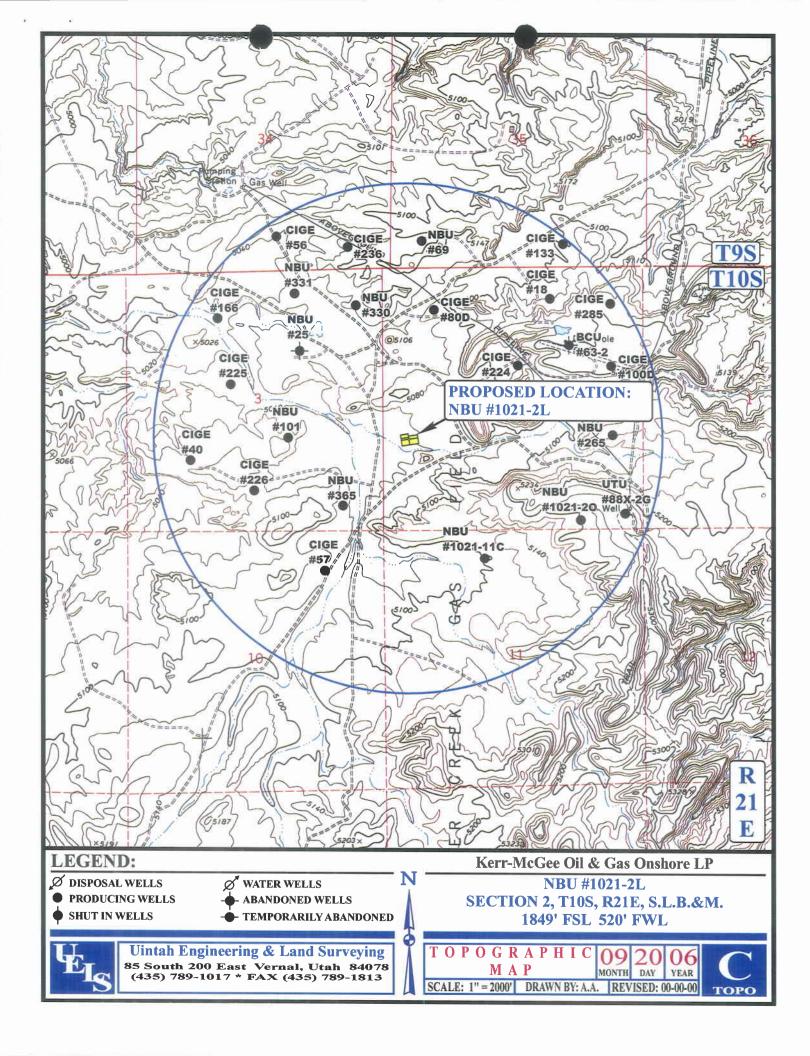
LOCATION PHOTOS

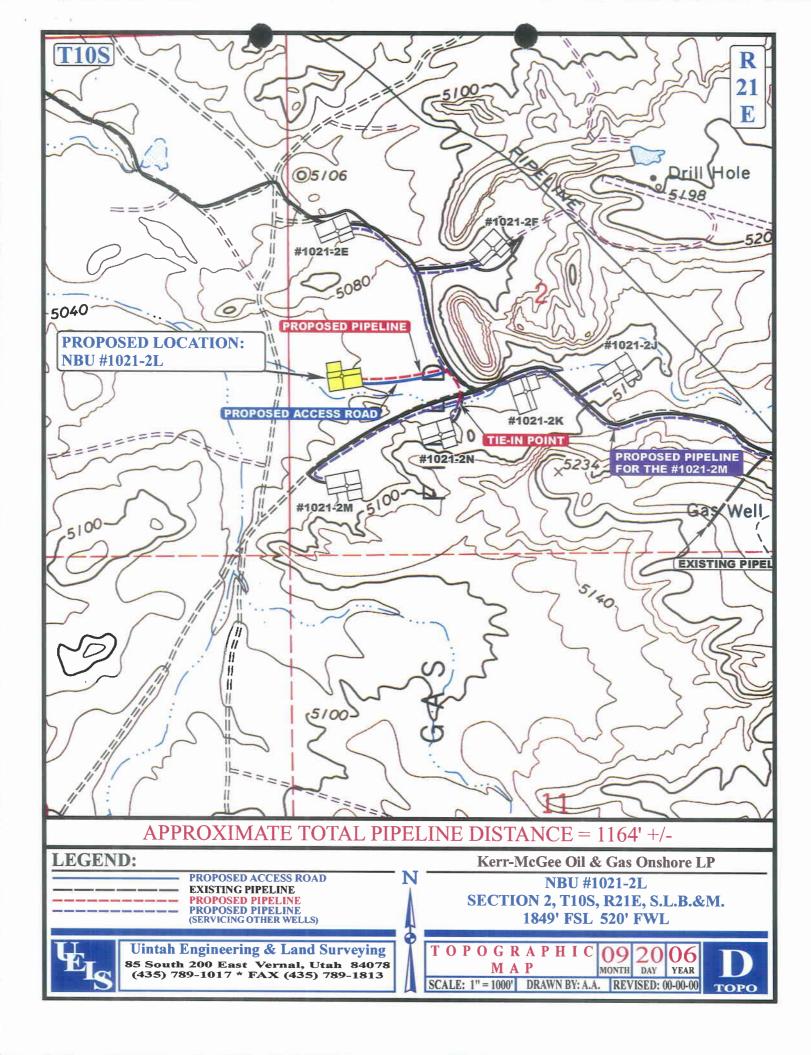
TAKEN BY: J.W. | DRAWN BY: A.A. | REVISED: 00-00-00

РНОТО









Kerr-McGee Oil & Gas Onshore LP

NBU #1021-2L PIPELINE ALIGNMENT LOCATED IN UINTAH COUNTY, UTAH **SECTION 2, T10S, R21E, S.L.B.&M.**

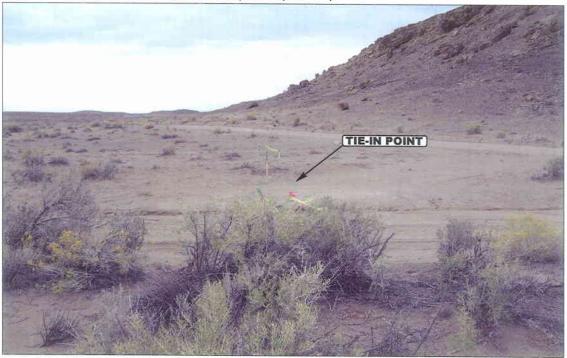


PHOTO: VIEW FROM TIE-IN POINT

CAMERA ANGLE:NORTHWESTERLY

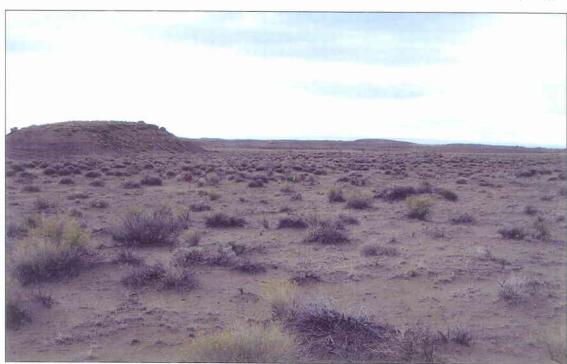


PHOTO: VIEW OF PIPELINE AT LOCATION

CAMERA ANGLE: WESTERLY



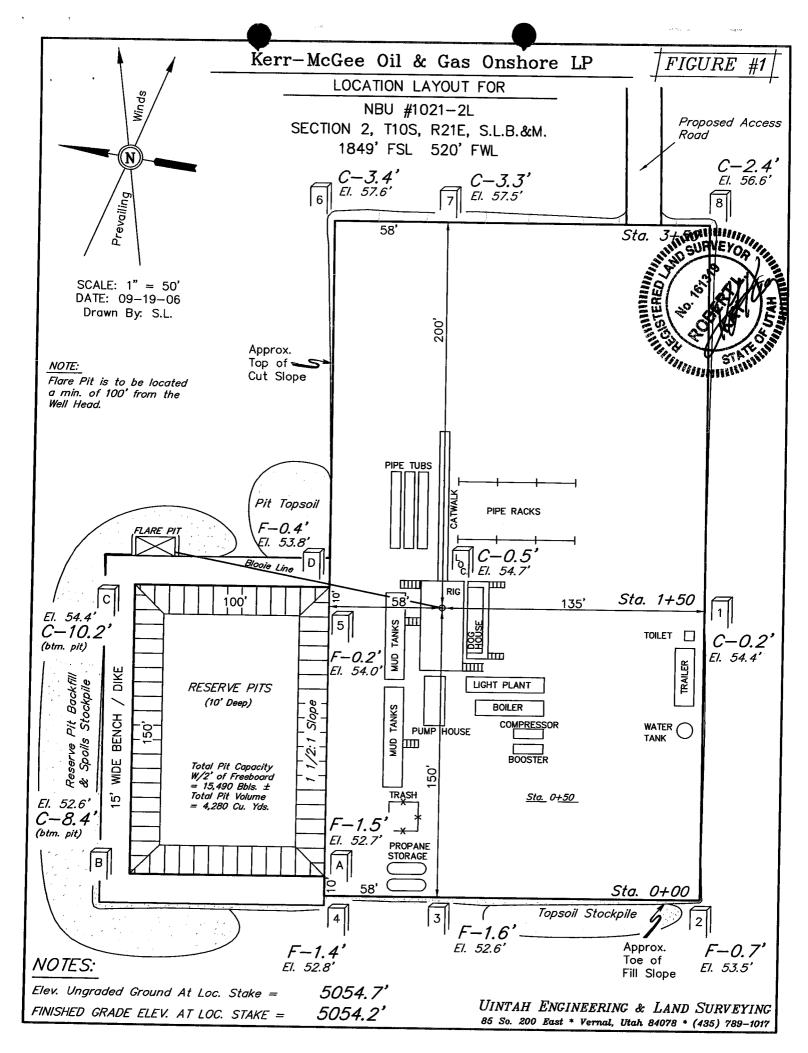
Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 435-789-1017 Vernal, Utah 84078 uels@uelsinc.com

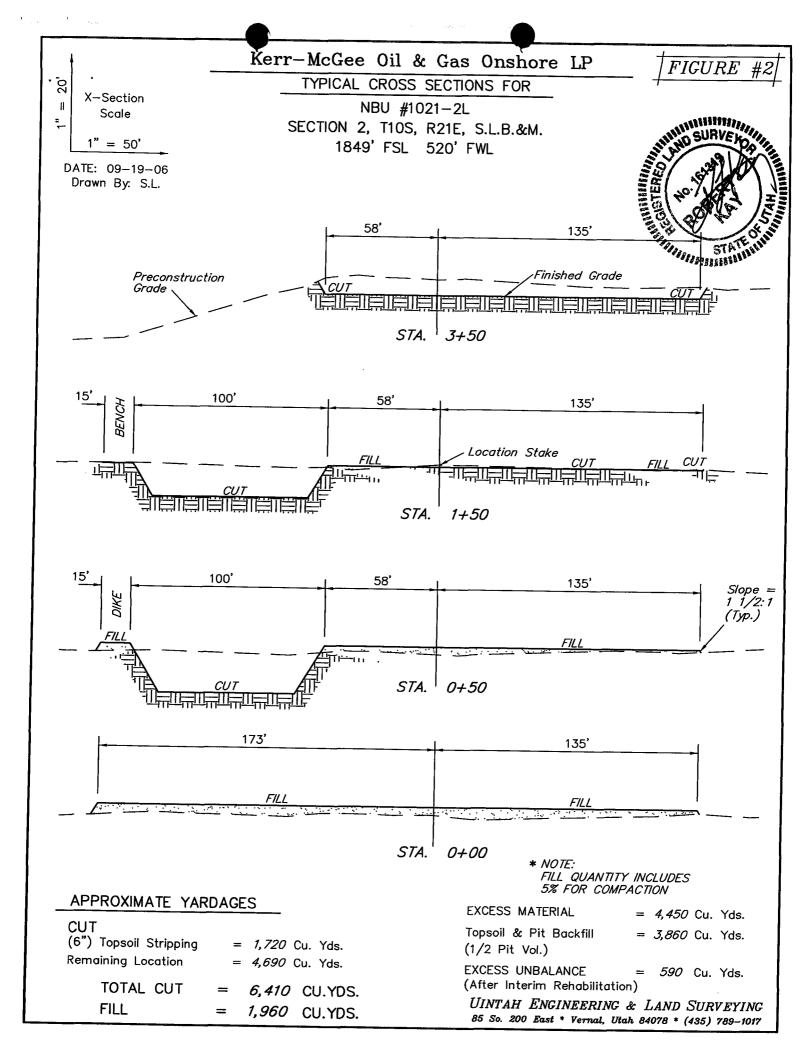
PIPELINE PHOTOS

MONTH DAY

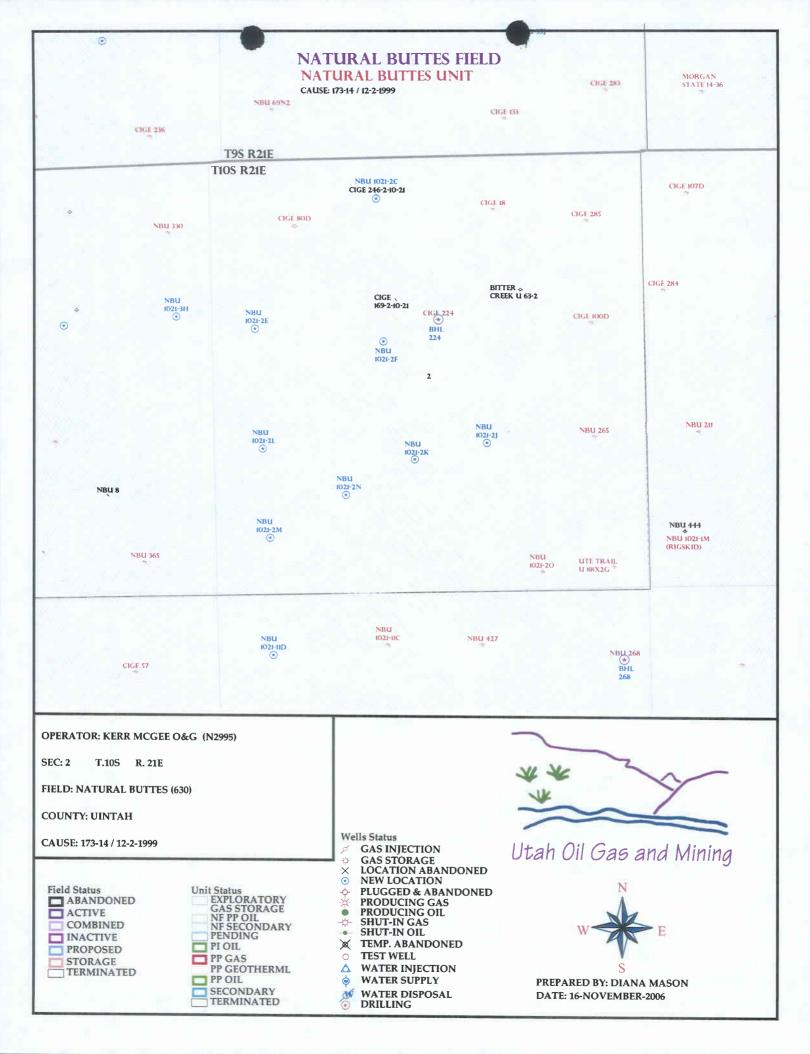
РНОТО

TAKEN BY: P.J. | DRAWN BY: A.A. | REVISED: 00-00-00





APD RECEIVED: 11/13/2006	API NO. ASSIGNED: 43-047-38843
WELL NAME: NBU 1021-2L	425 801 5001
OPERATOR: KERR-MCGEE OIL & GAS (N2995)	PHONE NUMBER: 435-781-7024
CONTACT: SHEILA UPCHEGO	
PROPOSED LOCATION:	INSPECT LOCATN BY: / /
NWSW 02 100S 210E SURFACE: 1849 FSL 0520 FWL	Tech Review Initials Date
BOTTOM: 1849 FSL 0520 FWL	Engineering DRD 12/13/06
COUNTY: UINTAH LATITUDE: 39.97527 LONGITUDE: -109.5261	Geology
UTM SURF EASTINGS: 625860 NORTHINGS: 44258	Surface Surface
FIELD NAME: NATURAL BUTTES (630)
LEASE TYPE: 3 - State LEASE NUMBER: ML-22652 SURFACE OWNER: 3 - State	PROPOSED FORMATION: WSMVD COALBED METHANE WELL? NO
RECEIVED AND/OR REVIEWED:	LOCATION AND SITING:
Plat	R649-2-3.
Bond: Fed[] Ind[] Sta[] Fee[]	Unit: NATURAL BUTTES
(No. 22013542)	OHIC: THIOMAL BOILED
NPotash (Y/N)	R649-3-2. General
Oil Shale 190-5 (B) or 190-3 or 190-13	Siting: 460 From Qtr/Qtr & 920' Between Wells
Water Permit	R649-3-3. Exception
(No. 43-8496) RDCC Review (Y/N)	Drilling Unit
(Date:)	Board Cause No: 193-14
NA Fee Surf Agreement (Y/N)	Board Cause No: 193-14 Eff Date: 12-2-1944
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	siting: 460 h usdry & unemn tres
NA Intent to Commingle (Y/N)	R649-3-11. Directional Drill
COMMENTS: Needs Preite	(11-17-06)
The constant of the constant o	()
STIPULATIONS: - STATEN	TENT OF BASIC
7-011 8	HALE
2-5.A C	sq Cont Sty
/5 /0117	



Application for Permit to Drill

Statement of Basis

11/30/2006

Utah Division of Oil, Gas and Mining

Page 1

APD No

API WellNo

Status

Well Type

Surf Ownr S

CBM

162

43-047-38843-00-00

GW

No

Operator KERR-MCGEE OIL & GAS ONSHORE, LP

0 FL 0 FL

Surface Owner-APD

Well Name NBU 1022-2L

Unit

Field

UNDESIGNATED

Type of Work

Location

NWSW 2 10S 21E S

GPS Coord (UTM) 625860E 4425842N

Geologic Statement of Basis

Kerr McGee proposes to set 2,200' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 3,600'. A search of Division of Water Rights records shows one water well within a 10,000 foot radius of the center of section 2. The well is approximately .75 miles from the proposed location. It produces from a depth of 2,640 and is listed as being used for oil field drilling water. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought to above the base of the moderately saline groundwater in order to isolate it from fresher waters uphole.

Brad Hill

11/30/2006

APD Evaluator

Date / Time

Surface Statement of Basis

The surface and minerals for the proposed location are both owned by SITLA. Mr. Jim Davis represented SITLA at the pre-site and had no concerns not covered in the APD. The proposed location appears to be the best site for drilling and operating a well in the immediate area.

The general area is the Sand Wash Drainage of Uintah, County. Sand Wash is approximately 36 air miles south of Vernal, Utah and approximately 18 miles southeast of Ouray, Utah. Access is by State of Utah Highways, Uintah County and oilfield development roads a distance of 51 miles from Vernal, UT.

Topography is characterized by broad open flats dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. White River is to the northeast about 3 miles. No springs exist in the area.

This proposed location is a sand dune area at the junction of 2 open draws and slopes slightly to the south. Higher ridges are located to the northeast to the west and contain sandstone ledge outcrops. A constructed pond containing water from runoff is about 100 yards to the north. A drainage separates the pond from the proposed pad.

Floyd Bartlett

11/17/2006

Onsite Evaluator

Date / Time

Conditions of Approval / Application for Permit to Drill

Category

Condition

Pits

A synthetic liner with a minimum thickness of 20 mils with a felt subliner shall be

properly installed and maintained in the reserve pit.



Utah Division of Oil, Gas and Mining

Operator

KERR-MCGEE OIL & GAS ONSHORE, LP

Well Name

NBU 1022-2L

API Number

43-047-38843-0

APD No 162

Field/Unit UNDESIGNATED

Location: 1/4.1/4 NWSW

Sec 2 Tw 10S

0 FL 0 FL Rng 21E

GPS Coord (UTM) 625859

4425851

Surface Owner

Participants

Floyd Bartlett (DOGM), Jim Davis (SITLA), Carroll Estes (Kerr McGee), David Kay (UELS).

Regional/Local Setting & Topography

The general area is the Sand Wash Drainage of Uintah, County. Sand Wash is approximately 36 air miles south of Vernal, Utah and approximately 18 miles southeast of Ouray, Utah. Access is by State of Utah Highways, Uintah County and oilfield development roads a distance of 51 miles from Vernal, UT.

Topography is characterized by broad open flats dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. White River is to the northeast about 3 miles. No springs exist in the area.

This proposed location is a sand dune area at the junction of 2 open draws and slopes slightly to the south. Higher ridges are located to the northeast to the west and contain sandstone ledge outcrops. A constructed pond containing water from runoff is about 100 yards to the north. A drainage separates the pond from the proposed pad.

Surface Use Plan

Current Surface Use

Grazing

Wildlfe Habitat

New Road

Miles

Well Pad

Src Const Material

Surface Formation

0.2

Width 278

Length 350

Onsite

UNTA

Ancillary Facilities N

Waste Management Plan Adequate? Y

Environmental Parameters

Affected Floodplains and/or Wetland N

Flora / Fauna

Moderately vegetated big sagebrush type with rabbit brush, shadscale curly mesquite, Indian ricegrass, spiny hopsage, halogeton, prickly pear and annual mustard also occurring.

Antelope, rabbits, small reptiles, birds and mammals. Sheep graze the area in the winter

Soil Type and Characteristics

Very deep sandy loam

Erosion Issues N Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required N

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? Y Paleo Potental Observed? N Cultural Survey Run? Y Cultural Resources?

Reserve Pit

Site-Specific Factors		Site I	Ranking		
Distance to Groundwater (feet)	>200		0		
Distance to Surface Water (feet)	300 to 1000		2		
Dist. Nearest Municipal Well (ft)	>5280		0		
Distance to Other Wells (feet)	300 to 1320		10		
Native Soil Type	Mod permeability		10		
Fluid Type	Fresh Water		5		
Drill Cuttings	Normal Rock		0		
Annual Precipitation (inches)	<10		0		
Affected Populations	<10		0		
Presence Nearby Utility Conduits	Not Present		0		
		Final Score	27	1	Sensitivity Level

Characteristics / Requirements

150' by 100' and 10'deep. The reserve pit is all within cut on the north west side of the location. A 15' wide bench is planned around the outer edges and 2' of freeboard.

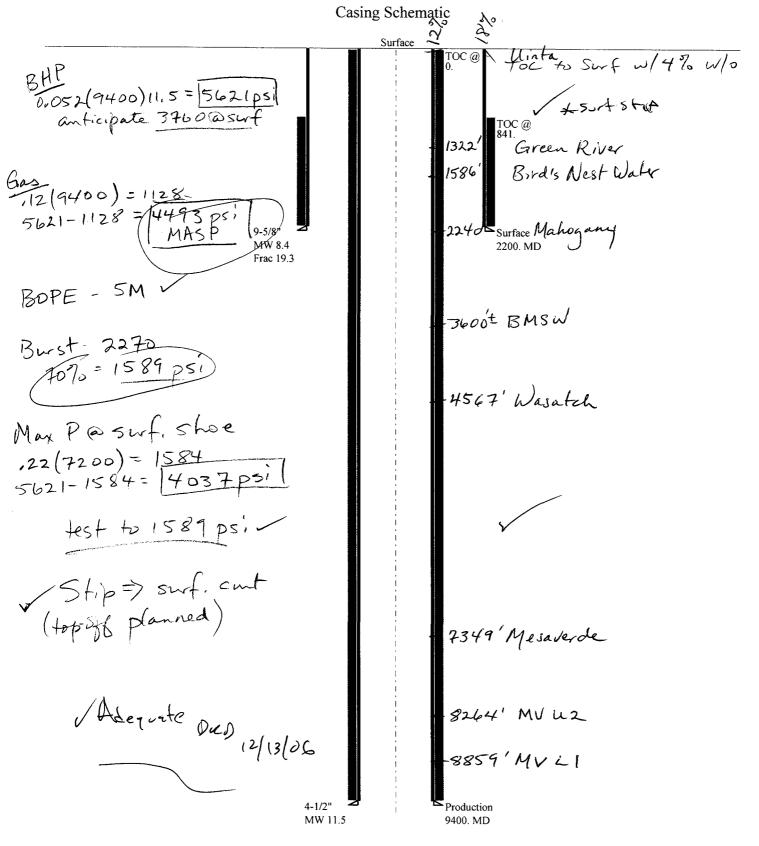
A pit liner is required. Kerr McGee lines all pits with a 20 mil liner and a felt sub-liner.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 20 Pit Underlayment Required? Y

Other Observations / Comments

Floyd Bartlett 11/17/2006 **Evaluator Date / Time**

2006-12 Kerr McGee NB 1021-2L



2006-12 Kerr McGee NBU 1021-2L Well name:

Kerr McGee Oil & Gas Onshore, LP Operator:

Surface String type: Project ID: 43-047-38843

Uintah County, Utah Location:

Design parameters:

Minimum design factors: **Environment:**

Collapse Collapse: H2S considered? No Mud weight: 8.400 ppg Design factor 1.125 Surface temperature: 75 °F

Design is based on evacuated pipe. Bottom hole temperature: 106 °F Temperature gradient: 1.40 °F/100ft

> Minimum section length: 1,500 ft **Burst:**

Design factor 1.00 Cement top: 841 ft **Burst**

Max anticipated surface

pressure: 1,936 psi Internal gradient: 0.120 psi/ft **Tension:** Non-directional string.

Calculated BHP 8 Round STC: 2.200 psi 1.80 (J) 1.80 (J) 8 Round LTC:

No backup mud specified. **Buttress:** 1.60 (J) Premium: 1.50 (J)

Body yield: 1.50 (B) Re subsequent strings:

2200

Next setting depth: Tension is based on buoyed weight.

Next mud weight: 11.500 ppg Neutral point: 1.929 ft Next setting BHP: 5,616 psi 19.250 ppg Fracture mud wt:

Fracture depth: 2,200 ft Injection pressure: 2,200 psi

62

Run Segment **Nominal** End True Vert Measured Drift Internal Seq Lenath Size Grade Weight **Finish** Depth Depth Diameter Capacity (ft) (in) (lbs/ft) (ft) (ft) (ft³) (in) 1 2200 9.625 32.30 H-40 ST&C 2200 2200 8.876 972.1 Collapse Run Collapse Collapse Burst Burst **Burst** Tension **Tension** Tension Sea Load Design Strength Load Strenath Design Load Strength Design (psi) (psi) (psi) **Factor** (psi) **Factor** (Kips) (Kips) **Factor**

2270

Helen Sadik-Macdonald Prepared Div of Oil, Gas & Minerals

1370

1.427

Phone: (801) 538-5357 FAX: (801) 359-3940

1.03

Date: December 11,2006 Salt Lake City, Utah

254

9.400 ft

4.08 J

1

960

Collapse is based on a vertical depth of 2200 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

2006-12 Kerr McGee NBU 1021-2L Well name:

Kerr McGee Oil & Gas Onshore, LP Operator:

String type: Production Project ID: 43-047-38843

Uintah County, Utah Location:

Design parameters: Minimum design factors: **Environment:** H2S considered?

Body yield:

Collapse Collapse: Mud weight: 11.500 ppg Design factor 1.125 Design is based on evacuated pipe.

Surface temperature: 75 °F Bottom hole temperature: 207 °F Temperature gradient: 1.40 °F/100ft

Non-directional string.

No

Minimum section length: 1,500 ft

Burst:

Design factor 1.00 Cement top: Surface

1.50 (B)

Burst

Max anticipated surface

pressure: 3,547 psi Internal gradient: 0.220 psi/ft Calculated BHP 5,615 psi

No backup mud specified.

Tension: 8 Round STC: 1.80 (J) 8 Round LTC: 1.80 (J) 1.60 (J) **Buttress:** Premium: 1.50 (J)

Tension is based on buoyed weight. 7,784 ft Neutral point:

Run Segment Nominal End True Vert Measured Drift Internal Lenath Seq Size Weight **Finish** Depth Grade Depth Diameter Capacity (lbs/ft) (ft) (in) (ft) (ft) (in) (ft³) 1 9400 11.60 4.5 **I-80** LT&C 9400 9400 3.875 820.3 Run Collapse Collapse Collapse **Burst Burst Burst** Tension **Tension Tension** Seq Load Strength Design Load Strength Design Load Strength Design (psi) (psi) **Factor** (psi) (psi) **Factor** (Kips) (Kips) **Factor** 1 5615 6360 1.133 5615 7780 1.39 90 212 2.35 J

Prepared Helen Sadik-Macdonald Div of Oil, Gas & Minerals Phone: (801) 538-5357 FAX: (801) 359-3940

Date: December 11,2006 Salt Lake City, Utah

Collapse is based on a vertical depth of 9400 ft, a mud weight of 11.5 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

November 22, 2006

Memorandum

To:

Assistant District Manager Minerals, Vernal District

From:

Michael Coulthard, Petroleum Engineer

Subject:

2006 Plan of Development Natural Buttes Unit

Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2006 within the Natural Buttes Unit, Uintah County, Utah.

API#

WELL NAME

LOCATION

(Proposed PZ Wasatch/MesaVerde)

43-047-38838	NBU	1021-2E	Sec	2	T10S	R21E	2068	FNL	0471	FWL
43-047-38839	NBU	1021-2F	Sec	2	T10S	R21E	2271	FNL	2090	FWL
43-047-38840	NBU	1021-2N	Sec	2	T10S	R21E	1253	FSL	1545	FWL
43-047-38841	NBU	1021-2M	Sec	2	Tlos	R21E	0730	FSL	0576	FWL
43-047-38842	NBU	1021-2K	Sec	2	T10S	R21E	1682	FSL	2432	FWL
43-047-38843	NBU	1021-2L	Sec	2	T10S	R21E	1849	FSL	0520	FWL
43-047-38844	NBU	1021-2J	Sec	2	T10S	R21E	1868	FSL	1998	FEL
43-047-38851	State	1022-250	Sec	25	T10S	R22E	1274	FSL	2121	FEL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File - Natural Buttes Unit
Division of Oil Gas and Mining

Central Files Agr. Sec. Chron Fluid Chron

MCoulthard:mc:11-22-06

From: Ed Bonner
To: Mason, Diana
Date: 2/14/2007 9:50 AM

Subject: The following wells have been given cultural resource clearance by the Trust Lands

Cultural Resource

CC: Davis, Jim; Garrison, LaVonne; Hill, Brad; Hunt, Gil; sheila.upchego... The following wells have been given cultural resource clearance by the Trust Lands Cultural Resources Group:

Kerr McGee Oil & Gas Onshore LP NBU 1022-7H-4 (API 43 047 38570) NBU 1021-2E (API 43 047 38838) NBU 1021-2F (API 43 047 38839) NBU 1021-2M (API 43 047 38841) NBU 1021-2K (API 43 047 38842) NBU 1021-2L (API 43 047 38843) NBU 1021-2J (API 43 047 38844) NBU 1021-36D (API 43 047 38845) NBU 1021-36E (API 43 047 38846) NBU 1021-36F (API 43 047 38847) NBU 1021-36N (API 43 047 38848) NBU 1021-36K (API 43 047 38849) NBU 1021-36C (API 43 047 38850) NBU 1021-1G (API 43 047 39001) NBU 1021-10 (API 43 047 39002) NBU 1021-1P (API 43 047 39003) NBU 1021-30I (API 43 047 39020) NBU 1021-30J (API 43 047 39021) NBU 1021-30K (API 43 047 39022) NBU 1021-30L (API 43 047 39023) NBU 1021-30M (API 43 047 39024) NBU 1021-30N (API 43 047 39025)

If you have any questions regarding this matter please give me a call.



State of Utah

Department of **Natural Resources**

MICHAEL R. STYLER **Executive Director**

Division of Oil, Gas & Mining

> JOHN R. BAZA Division Director



JON M. HUNTSMAN, JR. Governor

> GARY R. HERBERT Lieutenant Governor

> > February 14, 2007

Kerr-McGee Oil & Gas Onshore LP 1368 S 1200 E Vernal, UT 84078

Re:

NBU 1021-2L Well, 1849' FSL, 520' FWL, NW SW, Sec. 2, T. 10 South, R. 21 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-38843.

Sincerely,

Gil Hunt

Associate Director

pab **Enclosures**

cc:

Uintah County Assessor (via e-mail)

Bureau of Land Management, Vernal District Office

SITLA

Operator:	Kerr-McGee Oil & Gas Onshore LP					
Well Name & Number	NBU 1021-2L					
API Number:	38843	}				
Lease:	ML-22652					
Location: <u>NW SW</u>	Sec. 2	T. 10 South	R. 21 East			

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

- 24 hours prior to cementing or testing casing contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to spudding the well contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well contact Dustin Doucet
- Any changes to the approved drilling plan contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

• Dan Jarvis at:

(801) 538-5338 office

(801) 733-0983 home

• Carol Daniels at:

(801) 538-5284 office

• Dustin Doucet at:

(801) 538-5281 office

(801) 733-0983 home

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Page 2 43-047-38843 February 14, 2007

- 4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
- 5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
- 6. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.
- 7. Surface casing shall be cemented to the surface.

RECEIVED

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING NOV 0 9 2006 AMENDED REPORT

FORM 3

			51710					ignt changes)	
	AF	PLICA	TION FOR P	ERMIT TO	DRILL		MITERAL LEASE NO: V 2652 7. IF INDIAN, ALLOTTEE C	6. SURFACE: State	
1A. TYPE OF WOR	RK: DE	L 🛛	REENTER 🗌	DEEPEN [
B. TYPE OF WELL: OIL GAS OTHER SINGLE ZONE MULTIPLE ZONE							8. UNIT OF CA AGREEMENT NAME: UNIT #891008900A		
2. NAME OF OPER	RATOR:	O ONCH					NBU 1022-2L		
3. ADDRESS OF G	EE OIL & GA		_		PHONE		10. FIELD AND POOL, OF NATURAL BUT		
1368 S 120	0 E	OITY VERI	VAL STATE	UT ZIP 840	78 (435)	781-7024	11. QTR/QTR, SECTION,		
	WELL (FOOTAGES)						MERIDIAN: NWSW 2 1	10S 21E	
	1849'FSL, 5				20012				
	PRODUCING ZONE:			13,04	1.58843)	12. COUNTY:	13. STATE:	
			AREST TOWN OR POS	T OFFICE:			UINTAH	UTAH	
	S SOUTH C			16. NUMBER OF	ACRES IN LEASE:		17. NUMBER OF ACRES ASSIG	NED TO THIS WELL:	
	NEAREST PROPER	RIT OR LEASE	CHAC (I CC.)			489.92		40.00	
520'	NEAREST WELL (ORILLING, COM	IPLETED, OR	19. PROPOSED	DEPTH:		20. BOND DESCRIPTION:		
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) REFER TO TOPO C					9,400		RLB0005237		
21. ELEVATIONS	(SHOW WHETHER	DF, RT, GR, E1	·C.):	22. APPROXIMA	TE DATE WORK WILL ST.	ART:	23. ESTIMATED DURATION:		
5055'GL									
			PROPOSI	ED CASING AI	ND CEMENTING F	PROGRAM			
SIZE OF HOLE	CASING SIZE, GI	RADE, AND WE	IGHT PER FOOT	SETTING DEPTH	CE		ANTITY, YIELD, AND SLURRY WE		
12 1/4"	9 5/8	H-40	32.3#	2,200	265 SX CLASS	G 1	.18 YIELD 15.6 F		
7 7/8"	4 1/2	1-80	11.6#	9,400	1930 SX 50/50	POZ 1	.31 YIELD 14.3 F	PG	
- 1110	- '/ <u>-</u>								
	 								
					OUNTENTS				
25.					CHMENTS	n punce.		<u> </u>	
VERIFY THE FO	DLLOWING ARE ATT	ACHED IN ACC	ORDANCE WITH THE	UTAH OIL AND GAS (CONSERVATION GENERA	L ROLES			
WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER COMPLETE DRILLING PLAN									
V EVIDEN	ICE OF DIVISION OF	WATER RIGH	TS APPROVAL FOR US	SE OF WATER	FORM 5, 1F	OPERATOR IS P	ERSON OR COMPANY OTHER TI	HAN THE LEASE OWNER	
					RI	EGULATOF	RY ANALYST		
NAME (PLEASE PRINT) SHETLA UPCHEGO									
SIGNATURE ∠		CM-	14/1/1		DATE	/7/2006			
(This space for S	itate use only)		0						
						۸۲۲	EPTED DV DIA	1 505	
APPROVAL: APPROVAL: APPROVAL: UNIT PURPOSES ONLY							A FUN		
74 1 (40MDEILE						REC	TI PURPUSES (UNLY	
				(See Instru	ctions on Reverse Side)	MEC	EIVED	.7	
(11/2001)				•		MAR 3	0 2007 2 1 200	<i>i</i>	



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Vernal Field Office 170 South 500 East Vernal, UT 84078 (435) 781-4400 Fax: (435) 781-4410



IN REPLY REFER TO: 3160 UT08300

March 22, 2007

Ramey Hoopes Kerr-McGee Oil & Gas Onshore, LP 1368 South 1200 East P.O. Box 1148 Vernal, Utah 84078

Re Application for Permit to Drill

NBU 1021-2E;

NBU 1021-2F;

NBU 1021-2J;

NBU 1021-2K;

NBU 1022-2L;

NBU 1021-2M

SITLA Surface Ownership

Dear Ms. Hoopes:

Enclosed are your copies of the above State referenced APDs which we have accepted for Unit purposes.

If you have any questions, please contact me at (435) 781-4422.

Sincerely,

//s// Phyllis Phillips Legal Instruments Examiner

Enclosures

CC:

Well File

Reading File

Division of Oil-Gas-Mining

RECEIVED

MAR 3 0 2007

DIV. OF OIL, GAS & MINING

gr ²	DEPARTMENT OF NATURAL RESO		5. LEASE DESIGNATION AND SERIAL NUMBER:
	DIVISION OF OIL, GAS AND N	MINING	ML-22652
SUNDRY	NOTICES AND REPORT	TS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill n drill horizontal la	new wells, significantly deepen existing wells below on aterals. Use APPLICATION FOR PERMIT TO DRIL	current bottom-hole depth, reenter plugged wells, or to LL form for such proposals.	7. UNIT OF CA AGREEMENT NAME: UNIT #891008900A
1. TYPE OF WELL OIL WELL	GAS WELL 🚺 OTHER		8. WELL NAME and NUMBER: NBU 1021-2L
2. NAME OF OPERATOR: KERR McGEE OIL & GAS	S ONSHORE LP		9. API NUMBER: 4304738843
3. ADDRESS OF OPERATOR:		PHONE NUMBER: (435) 781-7024	10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL		er p	
FOOTAGES AT SURFACE: 1849'F	² SL, 520'FWL		COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHIP, RAN	IGE, MERIDIAN: NWSW 2 10S	21E	STATE: UTAH
11. CHECK APPI	ROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REP	ORT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
NOTICE OF INTENT	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION
(Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start:	CASING REPAIR	NEW CONSTRUCTION	TEMPORARILY ABANDON
	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR
- 1, 1 - 40, 40, 40, 40, 40, 40, 40, 40, 40, 40,	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL
(Submit Original Form Only)	CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF
Date of work completion:	COMMINGLE PRODUCING FORMATION	S RECLAMATION OF WELL SITE	OTHER: APD EXTENSION
	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION	
THE OPERATOR REQUE SO THAT THE DRILLING	ESTS AUTHORIZATION FOR A OPERATIONS MAY BE COMI IG ON FEBRUARY 14, 2007.	Approved by the Utah Division of Dil, Gas and Mining	THE SUBJECT WELL LOCATION. VAS APPROVED BY THE DIVISION COPY SENT TO OPERATOR Date: 2-26-2008 Initials: 45
NAME (PLEASE PRINT) SHEILA U	PCHEGO	TITLE SENIOR LAND	ADMIN SPECIALIST
SIGNATURE ///	K MULLA	DATE 2/6/2008	
(This space for State use only)	0		

RECEIVED FEB 2 5 2008

Application for Permit to Drill Request for Permit Extension Validation

Validation
(this form should accompany the Sundry Notice requesting permit extension)

Well Name: Location: Company Per	NW/SW SEC. 2, T1	KERR McGEE	OIL AND GAS ONSHORE LP
above, hereby	verifies that the	information as	drill on the property as permitted submitted in the previously does not require revision.
Following is a coverified.	checklist of some	e items related	to the application, which should be
•	rivate land, has t en updated? Yes		changed, if so, has the surface
•		~	he proposed well which would affect ation? Yes⊡ No⊠
	n any unit or othe peration of this p	•	put in place that could affect the Yes□No☑
	•		route including ownership, or right- ion? Yes□No☑
Has the approv	ved source of wa	ater for drilling	changed? Yes□No☑
	ire a change in p		surface location or access route it was discussed at the onsite
Is bonding still	in place, which o	covers this pro	posed well? Yes⊠No□
Mais	Land	heal	2/6/2008
Signature	9	0	Date
Title: <u>SENOIR</u>	LAND ADMIN SPE	CIALIST	
Representing:	KERR-McGEE O	IL & GAS ONSH	ORE LP

RECEIVED FEB 2 5 2008

DEPARTMENT OF NATURAL RE	SOURCES
DIVISION OF OIL, GAS AND	MINING

	ENTITY A	CTION FORM
Operator:	KERR McGEE OIL & GAS ONSHORE LP	Operator Account Number: N 2995
Address:	1368 SOUTH 1200 EAST	•
	city VERNAL	
	state UT zip 84078	Phone Number: (435) 781-7024

Well 1

API Number	Well	Name	QQ	QQ Sec Twp			County		
4304738843	NBU 1021-2L		NWSW	2	108	21E	UINTAH		
Action Code	Current Entity Number	New Entity Number	s	Spud Date		Entity Assignment Effective Date			
B	99999	2900	5	5/20/2008		5/29/08			

Comments: MIRU PETE MARTIN BUCKET RIG. WSmVD SPUD WELL LOCATION ON 05/20/2008 AT 1100 HRS.

Well 2

API Number	Well Name		QQ Sec Twp			Rng County			
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date				
Comments:			1						

Well 3

API Number	Well I	Well Name			Twp	Rng County		
Action Code	Current Entity Number	New Entity Number	s	pud Da	te		y Assignment fective Date	
Comments:								

	^~			CO	-	rc.	
4	(. 1	11)	N	1.13	.,		

(5/2000)

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- Re-assign well from one existing entity to a new entity

SHEILA UPCHEGO

Name /Please Print

SENIOR LAND SPECIALIST

5/22/2008 Date

E - Other (Explain in 'comments' section)

RECEIVED Title

MAY 2 2 2008

DIV. OF OIL, GAS & MINING

FORM 9

STATE OF UTAH

	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS AND MII		5. LEASE DESIGNATION AND SERIAL NUMBER: ML-22652
SUNDRY	NOTICES AND REPORTS	S ON WELLS	IF INDIAN, ALLOTTEE OR TRIBE NAME: UNIT or CA AGREEMENT NAME:
Do not use this form for proposals to drill ne drill horizontal lat	ew wells, significantly deepen existing wells below cur erals. Use APPLICATION FOR PERMIT TO DRILL for	rent bottom-hole depth, reenter plugged wells, or to orm for such proposals.	UNIT #891008900A
1. TYPE OF WELL OIL WELL			8. WELL NAME and NUMBER: NBU 1021-2L
2. NAME OF OPERATOR: KERR McGEE OIL & GAS	ONSHORE LP		9. API NUMBER: 4304738843
3. ADDRESS OF OPERATOR:		PHONE NUMBER: (435) 781-7024	10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1849'F	SL, 520'FWL		COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHIP, RANG	GE, MERIDIAN: NWSW 2 10S 2	1E	STATE: UTAH
11. CHECK APPR	ROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
NOTICE OF INTENT	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION
(Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start:	CASING REPAIR	NEW CONSTRUCTION	TEMPORARILY ABANDON
	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR
✓ SUBSEQUENT REPORT	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT (Submit Original Form Only)	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL
Date of work completion;	CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF
	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	✓ OTHER: WELL SPUD
	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION	
MIRU PETE MARTIN BUC W/28 SX READY MIX.		ertinent details including dates, depths, volum	36.7# SCHEDULE 10 PIPE. CMT
NAME (PLEASE PRINT) SHEILA U	PCHEGO		ADMIN SPECIALIST
SIGNATURE / //	41 /1 WU 9/10	DATE 5/22/2008	
This space for State use only)			

RECEIVED MAY 27 2008

B 1 \$1 mm

#116m-

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING 5. LEASE DESIGNATION AND SERIAL NUMBER: futlisti: ML-22652 IF INDIAN, ALLOTTEE OR TRIBE NAME: SUNDRY NOTICES AND REPORTS ON WELLS acidr**ámico** 7. UNIT or CA AGREEMENT NAME: Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. 111 01100 1 UNIT #891008900A 8. WELL NAME and NUMBER: 1. TYPE OF WELL GAS WELL 🗸 OIL WELL OTHER NBU 1021-2L 2. NAME OF OPERATOR: 9. API NUMBER: KERR McGEE OIL & GAS ONSHORE LP 4304738843 3. ADDRESS OF OPERATOR: PHONE NUMBER: 10. FIELD AND POOL OR WILDCAT: CITY VERNAL 210 84078 1368 SOUTH 1200 EAST STATE UT (435) 781-7024 NATURAL BUTTES 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1849'FSL, 520'FWL COUNTY: UINTAH QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSW 2 10S 21E STATE **UTAH** CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 11. TYPE OF SUBMISSION TYPE OF ACTION ACIDIZE DEEPEN REPERFORATE CURRENT FORMATION NOTICE OF INTENT · ~ (4)(4) 410000-(Submit in Duplicate) ALTER CASING FRACTURE TREAT SIDETRACK TO REPAIR WELL Approximate date work will start: CASING REPAIR NEW CONSTRUCTION TEMPORARILY ABANDON ---CHANGE TO PREVIOUS PLANS OPERATOR CHANGE TUBING REPAIR CHANGE TUBING PLUG AND ABANDON VENT OR FLARE SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK WATER DISPOSAL (Submit Original Form Only) CHANGE WELL STATUS PRODUCTION (START/RESUME) WATER SHUT-OFF Date of work completion: COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE ✓ OTHER: SET SURFACE CSG CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION 4-190-1 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU PROPETRO AIR RIG ON 05/23/2008. DRILLED 12 1/4" SURFACE HOLE TO 2250'. RAN 9 5/8" 36# J-55 SURFACE CSG. LEAD CMT W/300 SX PREM CLASS G @15.8 PPG 1.15 YIELD. TAILED CMT W/150 SX PREM CLASS G @15.8 PPG 1.15 YIELD. NO RETURNS TO PIT 100 +/- PSI LIFT. TOP OUT W/150 SX PREM CLASS G @15.8 PPG 1.15 YIELD. DOWN BACKSIDE WOC. 2ND TOP OUT W/150 SX PREM CLASS G @15.8 PPG 1.15 YIELD. DOWN BACKSIDE GOOD CMT TO SURFACE HOLE STAYED FULL. WORT SHEILA UPCHEGO SENIOR LAND ADMIN SPECIALIST NAME (PLEASE PRINT 5/28/2008 4-1000-1 SIGNATURÉ 161 (183**9** - 1 **RECEIVED** (This space for State use only)

JUN 0 9 2008

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER:
SUNDRY NOTICES AND REPORTS ON WELLS	ML-22652 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. 1. TYPE OF WELL	7. UNIT or CA AGREEMENT NAME: UNIT #891008900A 8. WELL NAME and NUMBER:
OIL WELL GAS WELL 🗹 OTHER	NBU 1021-2L
2. NAME OF OPERATOR: KERR McGEE OIL & GAS ONSHORE LP	9. API NUMBER: 4304738843
3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST CITY VERNAL STATE UT ZIP 84078 PHONE NUMBER: (435) 781-7024	10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1849'FSL, 520'FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSW 2 10S 21E	COUNTY: UINTAH STATE: UTAH
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO	
TYPE OF SUBMISSION TYPE OF ACTION	ICI, OICO INEIC DATA
NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: CASING REPAIR CHANGE TO PREVIOUS PLANS OPERATOR CHANGE CHANGE TUBING CHANGE TUBING PLUG AND ABANDON CHANGE WELL NAME PLUG BACK CHANGE WELL STATUS PRODUCTION (START/RESUME) COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volume	
FINISHED DRILLING FROM 2250' TO 9480' ON 06/29/2008. RAN 4 1/2" 11.6# I-80 PROD SX PREM LITE II @11.9 PPG 2.38 YIELD. TAILED CMT W/1040 SX 50/50 POZ @14.3 PFDROP PLUG & DISPLACE W/146 BBLS WATER W/CLAYSTAY & MAGNACIDE TO BUMFAND FLOATS HELD. NO CMT TO SURFACE. WASH STACK AND HANG CASING W/60K TEST OK. ND BOPS CLEAN TANKS. RELEASED ENSIGN RIG 12 ON 06/30/2008 AT 2359 HRS.	PG 1.31 YIELD. WASH LINES P PLUG W/3300 PSI RELEASE PSI TEST HANGER TO 5000 PSI
RELEASED ENGIGNING 12 ON 00/30/2000 AT 2339 TING.	RECEIVED
	JUL 1 1 2008
D!A'	OF OIL, GAS & MINING
NAME (R) FACE POINT, SHEILA UPCHEGO TITLE SENIOR LAND A	ADMIN SPECIALIST
7/8/2008	
SIGNATURE AND DATE 7/8/2008	

(This space for State use only)

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER: ML-22652
SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	7. UNIT OF CA AGREEMENT NAME: UNIT #891008900A
1. TYPE OF WELL OIL WELL GAS WELL OTHER	8. WELL NAME and NUMBER: NBU 1021-2L
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3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST CITY VERNAL STATE UT 2IP 84078 PHONE NUMBER: (435) 781-7024	10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES
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11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT	
TYPE OF SUBMISSION TYPE OF ACTION	
ACIDIZE DEEPEN	REPERFORATE CURRENT FORMATION
NOTICE OF INTENT	SIDETRACK TO REPAIR WELL
Approximate date work will start: CASING REPAIR NEW CONSTRUCTION	TEMPORARILY ABANDON
CHANGE TO PREVIOUS PLANS OPERATOR CHANGE	TUBING REPAIR
CHANGE TUBING PLUG AND ABANDON	VENT OR FLARE
✓ SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK	WATER DISPOSAL
(Submit Original Form Only) CHANGE WELL STATUS PRODUCTION (START/RESUME)	WATER SHUT-OFF
Date of work completion: COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE	OTHER: PRODUCTION
CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION	START-UP
THE SUBJECT WELL LOCATION WAS PLACED ON PRODUCTION ON 08/01/2008 AT 9: PLEASE REFER TO THE ATTACHED CHRONOLOGICAL WELL HISTORY.	
NAME (PLEASE PRINT). SHEILA UPCHEGO TITLE REGULATORY A	NALYST
SIGNATURE ///////////////////////////////////	
This space for State use only)	2'

<u> 1440 -</u> 1944 - 1960			VV	rell Op		114	ummary	<i>'</i> Long				
Operator		1	FIELD NAME		SP	DATE		GL	КВ	ROUTE		
KERR-MCGE	EE OIL & GAS ONSHORE	LP	NATURAL BUT	ITES		· .	20/2008 UNTY	5,055	5069	VISION		
	04738843		UTA	Н				UINTAH		ROCK	KIES	
Long/Lat.: 39.9	7530 / 109.52686		Q-Q/Sect/	Town/Ran	ge: NW	SW / 2	/ 10S / 21E		Footages:	1,849.00' FSL 520.	00' FWL	
		·		W	ellbore:	NBU	1021-2L					
MTD		מעד					PBMD	,		PBTVD		
	9,480	CTIVITY: I	DILLING	9,476		i	CTART DA	T-E: 5/20/2008				<u> </u>
VENT INFORM	arrion.	VE: DEVE					END DATE					
		VE. DEVE						. 6/36/2000 L STARTED F	PROD ·			
	REASON		Sil 47 KE					Status: COM				
IG OPERATIO		Mobilization	n Rig On	Location	Rig Cha	araes		ration Start	Finish Drilling	Rig Release	Ria C	Off Location
ETE MARTIN I		/02/2008	05/20	0/2008	05/20/2			0/2008	05/20/2008	05/20/2008		/20/2008
Date	Time	Duration	Phase	Code	Subco	P/U	1		Opera	anness conservation of the con-		
	Start-End	(hr)			de						1.11	
/20/2008	SUPERVISOR: LE	W WELDO	ON								MD:	54
	11:00 - 16:00	5.00	DRLCON	02		P	5/20/08 D	RILL AND SE	T 40' OF SCHED	PUD WELL @ 1100 OULE 10 PIPE DRIL D STATE NOTFIED	L.	
/23/2008	SUPERVISOR: LE	W WELDO	ON .			<u>.</u>					MD:	680
	15:00 - 0:00	9.00	DRLSUR	02		Р		AND RIG UP EPORT TIME (VELL @ 1500 HR :	5/23/08	
/24/2008	SUPERVISOR: LE	W WELDO	DN .						The same of the sa		MD:	1,440
	0:00 - 12:00	12.00	DRLSUR	02		Р	RIG DRIL	LING AHEAD	NO WATER 930			
	12:00 - 0:00	12.00	DRLSUR	02		Р	RIG DRIL	LING AHEAD	NO WATER 144	0'		
/25/2008	SUPERVISOR: LE	W WELDO	N		*						MD:	1,980
	0:00 - 12:00	12.00	DRLSUR	02		Р		LING AHEAD ID PUMP 1830		TER @ 1500' CIRC	CULATI	NG
	12:00 - 0:00	12.00	DRLSUR	02		Р	RIG DRIL	LING AHEAD	CIRCULATING \	MITH SKID PUMP	1980'	
/26/2008	SUPERVISOR: LE	W WELDO	DN .								MD:	2,250
	0:00 - 6:00	6.00	DRLSUR	02		Р	RIG T/D @	@ 2250' T/D C	ONDITION HOLI	E 1HR		
	6:00 - 9:00	3.00	DRLSUR	05		Р	TRIP DP	OUT OF HOLE	Ē			
	9:00 - 12:00	3.00	DRLSUR	11		Р	DUM 220	7' OF 9 5/8 CS	G AND RIG DO	A/NI A ID DIC		

Wins No.:	95120				NBL	J 1021	-2L API No.: 4304738843
	12:00 - 13:00	1.00	DRLSUR	15		Р	CEMENT 1ST STAGE WITH 300 SKS TAIL @ 15.8# 1.15 5.0 GAL/SK NO RETURNS TO PIT + - 100 PSI LIFT
	13:00 - 13:30	0.50	DRLSUR	15		Р	1ST TOP JOB 150 SKS DOWN BS WOC
	13:30 - 15:30	2.00	DRLSUR	15		Р	2ND TOP JOB 150 SKS DOWN BS WOC
	15:30 - 17:30	2.00	DRLSUR	15		Р	3RD TOP JOB 150 SKS DOWN BS GOOD CMT TO SURFACE AND STAYED AT SURFACE
	17:30 - 17:30	0.00	DRLSUR				NO VISIBLE LEAKS PIT 1/4 FULL WORT
	0.0000000000000000000000000000000000000						MD: 2,250
6/20/2008	<u>SUPERVISOR:</u> 14:00 - 22:00	8.00	MIRU	01	Ε	Р	RIG DOWN ENSIGN #12
	22:00 - 0:00	2.00	MIRU	12	D	Р	WAIT ON DAYLIGHT WIHLE RIGGING DOWN ADN PREPARING TO MOVE.
0/04/0000	CURER/46OB.	DDIIGE TAV	100	-x,		× • • •	MD: 2,250
6/21/2008	<u>SUPERVISOR:</u> 0:00 - 7:00	7.00	RDMO	12	D	Р	WAIT ON DAYLIGHT, RIG DOWN AND PREPARE TO MOVE.
	7:00 - 15:00	8.00	MIRU	01	Α	Р	MOVE RIG WITH JONES TRUCKING.
	15:00 - 0:00	9.00	MIRU	01	В	Р	RIG UP ROTARY TOOLS.
syakolye sakuluktor na	OUDED/460D.	DOUGE TAY			***		MD: 2,363
6/22/2008	<u>SUPERVISOR:</u> 0:00 - 7:00	7.00	MIRU	01	В	Р	RIG UP ROTARY TOOLS.
	7:00 - 10:30	3.50	PRPSPD	13	Α	Р	NU BOP'S
	10:30 - 15:00	4.50	PRPSPD	13	С	Р	TEST PIPE RAMS, BLIND RAMS, FLOOR VALVES, CHOKE AND ALL RELATED VALVES TO 250 AND 5000 PSI. TEST HYDRIL TO 250 AND 2500 PSI. TEST CASING TO 1500 PSI FOR 30 MINUTES.
	15:00 - 15:30	0.50	PRPSPD	06	С	Р	INSTALL WEAR BUSHING.
	15:30 - 20:00	4.50	PRPSPD	05	Α	Р	HELD SAFETY MEETING WITH FRANKS, RU SAME. PU BHA AND DP TO 2200'. RD FRANKS.
	20:00 - 21:00	1.00	PRPSPD	05	Α	Р	INSTALL ROTATING HEAD INSERT.

ins No.:	95120					NBU	1021	
	22:30 -	23:30	1.00	DRLPRO	02	В	Р	DRILL 2250'-2363' (113') 113'/HR. 12/14K WOB, 110 BIT RPM, 8.3/28
	23:30 -	0:00	0.50	DRLPRO	09	Α	Р	SURVEY @ 22283' - 1.29 DEG.
23/2008	SUPER\	/ISOR:	BRUCE TAYL	OR	· ••			<u>MD:</u> 4,406
	0:00 -	3:00	3.00	DRLPRO	02	В	P	DRILL 2363'-2677' (314') 104.6'/HR. 12/14K WOB, 110 BIT RPM, 8.5/33
	3:00	3:30	0.50	DRLPRO	06	Α	Р	SERIVCE RIG, FUNCTION PIPE RAMS.
	3:30	- 11:30	8.00	DRLPRO	.02	В	Р	DRILL 2677'-3367' (690') 86.2'/HR. 14/16K WOB, 110 BIT RPM, 8.9/33
	11:30	- 12:00	0.50	DRLPRO	06	Α	Р	RIG SERVICE, FUNCTION PIPE RAMS.
	12:00	- 22:30	10.50	DRLPRO	02	В	Р	DRILL 3367'-4311' (944') 89.9'/HR. 16K WOB, 110 BIT RPM, 9.0/40
	22:30	- 23:00	0.50	DRLPRO	09	Α	Р	SURVEY @ 4231' - 1.41 DEG.
	23:00	- 0:00	1.00	DRLPRO	02	В	Р	DRILL 4311'-4406' (95') 95'/HR. 16K WOB, 110 BIT RPM 9.0/40
	OURTE	V4COD.	DDUGE TAV	LOB		-,)		MD: 6,055
24/2008		- 1:00	BRUCE TAYI 1.00	DRLPRO	02	В	Р	DRILL 4406'-4527' (121')
	1:00	- 1:30	0.50	DRLPRO	06	Α	Р	SERVICE RIG, FUNCTION TEST COM.
	1:30	- 15:30	14.00	DRLPRO	02	В	Р	DRILL 4527'-5628' (1101') 78.6'/HR. 16/18K WOB, 110 BIT RPM, 9.4/44
	15:30	- 16:00	0.50	DRLPRO	06	Α	Р	SERVICE RIG, FUNCTION PIPE RAMS.
	16:00	- 0:00	8.00	DRLPRO	02	В	Р	DRILL 5628'-6055' (427') 53.3'/HR. 16/18K WOB, 110 BIT RPM, 9.6/45
5/25/2008	SUPER	RVISOR:	BRUCE TAY	′LOR				<u>MD:</u> 7,012
		- 2:30		DRLPRO	02	В	Р	DRILL 6055'-6227' (172') 68.8'/HR. 18K WOB, 110 BIT RPM, 9.7/45
	2:30	- 3:00	0.50	DRLPRO	09	Α	P	SURVEY @ 6140'- 2.0 DEG.
	3:00	- 13:3	0 10.50	DRLPRO	02	В	Р	DRILL 6227'-6636' (409') 38.9'/H. 18/20K WOB, 110 BIT RPM,

Vins No.:	95120			Militaria Ligadoria		NB	U 1021	I-2L API No.: 430473884
	13:30	- 14:00	0.50	DRLPRO	06	Α	Р	SERVICE RIG, FUNCTION COM, HCR.
	14:00	- 0:00	10.00	DRLPRO	02	В	Р	DRILL 6636'-7012' (376') 37.6'/HR. 20/22K WOB, 110 BIT RPM, 10.2/45
26/2008	SUPER	VISOR:	BRUCE TAYL	.OR				MD: 7,506
		- 8:00	8.00	DRLPRO	02	В	Р	DRILL 7012'-7327' (315') 39.3'/HR. 22K WOB, 110 BIT RPM, 10.2/45
	8:00	- 8:30	0.50	DRLPRO	04	С	Р	CIRCULATE BU, BUILD AND PUMP SLUG, DROP TOTCO SURVEY.
	8:30	- 11:30	3.00	DRLPRO	05	Α	Р	POOH FOR BIT DUE TO SLOW P-RATE. WORK THROUGH TIGHT SPOTS @ 5634', 3414' THROUGH 2874'.
	11:30	- 13:00	1.50	DRLPRO	06	D	Р	SLIP AND CUT DRILL LINE. REMOVE ATTENNA FROM CROWN WITH BHI.
	13:00	- 13:30	0.50	DRLPRO	06	Α	Р	SERVICE RIG,
	13:30	- 14:30	1.00	DRLPRO	05	Α	Р	FINISH OUT OF HOLE.
	14:30	- 19:30	5.00	DRLPRO	05	Α	Р	MAKE UP NEW Q506 PDC AND TIH WITH SAME.
	19:30	- 20:30	1.00	DRLPRO	04	D	x	LOST 127 BBLS ON TRIP, CIRCULATE AND RAISE LCM CONCENTRATION TO 5% WITH CEDAR FIBER AND NATURE SEAL. REGAIN FULL RETURNS.
	20:30	- 0:00	3.50	DRLPRO	02	В	Р	DRILL 7327'-7506' (179') 51.1'/HR. 18K WOB, 110 BIT RPM, 10.3/45
27/2009	CHDED	VISOD:	BRUCE TAYL	OB			7/14 VIII VIII VIII VIII VIII VIII VIII VI	MD: 8,674
27/2008		- 16:00	16.00	DRLPRO	02	В	P	DRILL 7506'-8337' (831') 51.9'/HR. 18K WOB, 105 BIT RPM, 11.3/45
	16:00	- 16:30	0.50	DRLPRO	06	Α	Р	SERVICE RIG.
	16:30	- 0:00	7.50	DRLPRO	02	В	P	DRILL 8337'-8674' (337') 44.9'/HR. 18K WOB, 105 BIT RPM, 11.5/45, 8%LCM
28/2008	SUPER	VISOR:	BRUCE TAYL	OR				MD: 9,151
_3.2000		- 8:00	8.00	DRLPRO	02	В	Р	DRILL 8674'-8924' (250') 31.2'/HR. 20/22K WOB, 105 BIT RPM, 11.6/45 , P-RATE DOWN TO 8'/HR.
	8:00	- 9:00	1.00	DRLPRO	04	С	Р	CIRCULATE BOTTOMS UP, MIX AND PUMP SLUG, DROP TOTCO SURVEY TOOL.
	9:00	- 13:00	4.00	DRLPRO	05	Α	Р	POOH FOR BIT #3

8/4/2008 9:41:39AM

Wins No.:	95120				NB	U 1021	-2L API No.: 4304738843
	9:00 - 13:00	4.00	DRLPRO	05	Α	Р	POOH FOR BIT #3
	13:00 - 18:30	5.50	DRLPRO	05	Α	Р	MAKE UP NEW Q506 AND TIH WITH SAME.
	18:30 - 0:00	5.50	DRLPRO	02	В	Р	DRILL 8924'- 9151' (227') 41.2'/HR. 18K WOB, 105 BIT RPM, 11.8/45 , BU GAS 6500 UNITS, 30' FLARE, LOST 68 BBLS ON TRIP.
			Ale:		11.99		MD: 9,480
6/29/2008	<u>SUPERVISOR:</u> 0:00 - 8:00	8.00	OR DRLPRO	02	В	Р	DRILL 9151'-9480' (329')41.1'/HR. 18K WOB, 105 BIT RPM. 11.9/45
	8:00 - 9:00	1.00	DŖLPRO	04	С	Р	CIRCULATE BOTTOM UP. MIX AND PUMP SLUG
	9:00 - 10:30	1.50	DRLPRO	05	E	Р	SHORT TRIP 20 STANDS.
	10:30 - 14:30	4.00	DRLPRO	04	С	Р	CIRCULATE BOTTOMS UP, GAS 5000+ SATURATED, 30 BBL GAIN 30-35' FLARE. RAISE MW TO 12.1 PPG.
	14:30 - 22:30	8.00	DRLPRO	05	В	Р	HELD SAFETY MEETING WITH WEATHERFORD. RU AND POOH LDDS, BREAK KELLY, LD BHA.
	22:30 - 23:00	0.50	DRLPRO	05	В	Р	PULL WEAR BUSHING.
	23:00 - 0:00	1.00	EVALPR	08	Α	Р	HELD SAFETY MEETING, RU HALLIBURTON AND START IN HOLE WITH QUAD COMBO.
6/30/2008	<u>SUPERVISOR:</u> 0:00 - 6:00	BRUCE TAYL 6.00	OR EVALPR	08	Α	Ρ	MD: 9,480 LOG WITH QUAD COMBO FROM 9480' TO CSG. SHOE, RUN GR TO SURFACE.
	6:00 - 7:00	1.00	CSG	11	Α	Р	HELD SAFETY MEETING WITH WEATHERFORD, RU SAME.
	7:00 - 14:00	7.00	CSG	11	В	Р	RUN CSG. AS FOLLOWS: FLOAT SHOE, 1 JT. CSG. FLOAT COLLAR, 116 JTS. CSG. 1 MARKER JTS. SET AT 4570.13', 108 JTS. 4 1/2" 11.6 PPF I-80 CSG. OVER ALL LENGTH 9473' SET AT 9473'. CENTRALIZED WITH 15 BOW SPRINGS, 1 ON FIRST 3 JTS. THEN EVERY 3RD JT. SPACE OUT, INSTALL HANGER JOINT AND PLUG RETAINER.
	14:00 - 16:00	2.00	CSG	04	E	Р	CIRCULATE BOTTOMS UP WITH RIG PUMPS. RD CASING CREW. HELD SAFETY MEETING WITH HALLIBURTON.
	16:00 - 19:00	3.00	CSG	15	Α	Р	SWITCH TO HOWCO, TEST LINES TO 5000 PSI AND CEMENT 4 1/2" AS FOLLOWS: 20 BBLS MUD FLUSH @ 8.3 PPG, 20 SKS PL2 SCAVENGER MIXED @ 9.5 PPG, LEAD W/ 550 SKS PL2 MIXED @ 11.9 PPG, TAIL W/ 1040 SKS 50:50 POZ MIXED @ 14.3 PPG, WASH LINES, DROP PLUG & DISPLACE W/146 BBLS WATER W/ CLAYSTAY & MAGNACIDE TO BUMP PLUG W/ 3300 PSI. RELEASE PSI AND FLOATS HELD. NO CEMENT TO SURFACE

Wins No.:	95120				NE	3U 1021	-2L	in in property of the second	API No.:	4304738843
	19:00	- 19:30	0.50	CSG 1	1 C	Р	WASH STACK AND HA 5000 PSI, TEST OK,	ANG CASING WITH	⊣ 60K, TEST HAN	GER TO
	19:30	- 19:30	0.00	CSG 1	3 A	Р	ND BOP'S, CLEAN TAI	NKS, RELEASE RI	G AT 23:59 PM 6/	30/08.
EVENT INFOR	MATION:	EVENT A	CTIVITY: CO	MPLETION			START DATE: 7/8/2008			
		OBJECT	IVE: CONSTR	UCTION			END DATE: 7/10/2008			
		OBJECT	IVE 2: ORIGIN	I AL			DATE WELL STARTED I	PROD.:		
		REASON	: SURF FACI	LITIES			Event End Status: COM	MPLETE		
RIG OPERATION	ONS:	Begin	Mobilization	Rig On Loca	tion Rig	Charges	Rig Operation Start	Finish Drilling	Rig Release	Rig Off Location
Date	1	Time art-End	Duration (hr)	Phase Co	de Subco	P/U		Operati	on	
7/8/2008	SUPE	RVISOR: H	AL BLANCHAI	RD						MD:
		-								

the state of the state of	95120		and the second second second			NBC	J 1021	1-2L API No.: 4304738843
EVENT INFORM	MATION:	EVEN	T ACTIVITY: CO	MPLETIC	N	an electrical transfer and	na ar Carra Albana Talia	START DATE: 7/23/2008
		OBJE	CTIVE: DEVELO	PMENT				END DATE:
		OBJECTIVE 2: ORIGINAL						DATE WELL STARTED PROD.:
		REAS	ON: MV					Event End Status:
RIG OPERATIO	NS:	Be	gin Mobilization	Rig On	Location	Rig Ch	arges	Rig Operation Start Finish Drilling Rig Release Rig Off Location
KEY 243 / 243						g =g==		To the control of the
Date	Tin Start-		Duration (hr)	Phase	Code	Subco	P/U	Operation
7/24/2008	SUPERV	ISOR:	KEN WARREN			<u> </u>		<u>MD:</u>
	7:00 -	7:15	0.25	COMP	48		Р	HSM, P/T CSG
	7:15 -		10.25	COMP	47	В	Р	R/D ROAD RIG FROM NBU 1021-2M TO NBU 1021-2L, MIRU SPOT EQUIP, N/D WELL HEAD, N/U BOPE, P/U 3-7/8 MILL, TALLEY & P/U
7/25/2008	SUPERV	ISOR:	KEN WARREN	12 C. T.			**************************************	MD:
	7:00 -		8.00		36	Е	Р	STNDBY
7/28/2008	SUPERV	ISOB.	KENIMADDEN					The control of the co
20,2000	7:00 -		KEN WARREN	COMP	40		_	MD:
	7:00 - 7:15 -		0.25	COMP	48	_	P	HSM, P/U PERF GUNS
	7.15	18.00	10.75	COMP	36	Е	Р	MIRU WEATHERFORD FRAC & CUTTERS WIRE LINE. STG #1] P/U RIH W/ 3-3/8, 23 GRM, 0.36" HOLE, 4 SPF, 90* PH, PERF MESAVERDE, 9388'-9390' 8 HOLES, 9332'-9334' 8 HOLES, 9318'-9320' 8 HOLES, 9306'-9308' 8 HOLES, 9262'-9264' 8 HOLES [40 HOLES] P/T SURFACE LINES TO 8500#.
							WHP=2000#, BRK DN PERFS @ 3031#, INJ PSI=4900#, INJT RT=50.5, ISIP=2610#, FG=.72, PUMP'D2483 BBLS SLK WTR W/ 82402# 30/50 MESH W/ 5515# RESIN COAT IN TAIL. ISIP=2988#, FG=.76, AR=51.3, AP=5294#, MR=51.7, MP=6567#, NPI=378#, 35/40 CALC PERFS OPEN 88%. STG #2] P/U RIH W/ BKR 8K CBP & PERF GUN. SET CBP @ 9184', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE, 4 SPF, 90* PH, 9152'-9154' 8 HOLES, 9086'-9090' 16 HOLES, 8954'-8958' 16 HOLES, [40 HOLES]	
								WHP=2750#,INJT PSI=5400#, INJT RT=51.8, ISIP=3029#, FG=.78, PUMP'D 2594.3 BBLS SLK WTR W/ 95980# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=3332#, FG=.81, AR=51.8, AP=5439#, MR=52.3, MP=6426#, NPI=303#, 34/40 CALC PERFS OPEN 84%. STG #3] P/U RIH W/ BKR 8K CBP & PERF GUN, SET CBP @ 8872'
						·		PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE, 4 SPF, 90° PH, 8840'-8842' 8 HOLES, 8802'-8804' 8 HOLES, 8778'-8780' 8 HOLES, 8746'-8748 8 HOLES, 8686'-8688' 8 HOLES [40 HOLES]
								WHP=0#, BRK DN PERFS @ 4771#, INJT PSI=4450#, INJT RT=51.6, ISIP=2742#, FG=.76, PUMP'D 4963 BBLS SLK WTR W/ 183404# 30/50 MESH W/ 5500# RESIN COAT IN TAIL. ISIP=2863#, FG=.77, AR=51.8, AP=4556#, MR=52.2, MP=7156#, NPI=121#, 40/40 CALC PERFS OPEN 100%.
								STG #4] P/U RIH W/ BKR 8K CBP & PERF GUN. SET CBP @ 8592', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, O.36" HOLE, 4 SFP, 90* PH, 8560'-8562' 8 HOLES, 8524'-8526' 8 HOLES, 8472'-8474' 8 HOLES, 8430'-8432' 8 HOLES, 8388'-8390' 8 HOLES, [40 HOLES]
								WHP=1650#, INJ PSI=4150#, INJT RT=51, ISIP=2582#, FG=.75, PUMP'D 4011.6 BBLS SLK WTR W/ 148549# 30/50 MESH W/ 5500# RESIN COAT IN TAIL. ISIP=2794#, FG=.77, AR=51, AP=4273#, MR=52, MP=5607#, NPI=212#, 40/40 CALC PERFS OPEN 100%.
***************************************		W.5					-W-	P/U & RIH W/ BKR 8K CBP & SET @ 8338', R/D CUTTERS & WEATHERFORD FRAC EQUIP, SWIFN.
/29/2008	SUPERVIS	SOR:	KEN WARREN					MD:
	7:00 -	7:15	0.25	COMP	48		P	HSM, MAKING CONNECTIONS

Wins No.:	95120		in the field of <u>in the fi</u> nal state of the field of the		NBI	U 1021-	2L API No.: 4304738843
	7:15 - 7:15	0.00	COMP	44	С	Р	OPEN WELL, 0# CSG, N/D FRAC VALVES, N/U BOPE, R/U TBG EQUIP. P/U 3-7/8 BIT W/ POBS PKG, RIH W/ 2-3/8 L-80 TBG, TAG KILL PLUG, P/U PWR SWVL, BRK CIRC W/ RIG PUMP.
							PLUG #1] DRL THROUGH BKR 8K CBP @ 8338' IN 10 MIN. 1200# INCREASE.
							PLUG #2] CONTINUE TO RIH, TAG SAND @ 8562' [30' FILL] C/O & DRL THROUGH BKR 8K CBP @ 8592' IN 10 MIN. 300# INCREASE.
							PLUG #3] CONTINUE TO RIH, TAG SAND @ 8842' [30' FILL] C/O & DRL THROUGH BKR 8K CBP @ 8872' IN 12 MIN. 400# INCREASE.
							PLUG #4] CONTINUE TO RIH, TAG SAND @ 9154' [30' FILL] C/O & DRL THROUGH BKR 8K CBP @ 9184' IN 10 MIN. 400# INCREASE.
							CONTINUE TO RIH & C/O TO PBTD @ 9427', CIRC HOLE, R/D PWR SWVL, L/D 16 JNTS ON FLOAT, P/U HANGER & LAND TBG W/ 281 JNTS 2-3/8 L-80 TBG. [EOT @ 9825.21'] DROP BALL, R/D TBG EQUIP, N/D BOPE, N/U WELL HEAD, PUMP OFF BIT W/ 1/2 BBL @ 2200#, TURN OVER TO F/B CREW.
7/29/2008	SUPERVISOR:	KEN WARREN		- delta-			MD:
	7:00 -			35	G		7 AM FLBK REPORT: CP 1900#, TP 1800#, 16/64" CK, 41 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 2260 BBLS LEFT TO RECOVER: 11792
7/30/2008	SUPERVISOR:	KEN WARREN					MD:
	7:00 -			33	Α		7 AM FLBK REPORT: CP 1900#, TP 1800#, 16/64" CK, 41 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 2260 BBLS LEFT TO RECOVER: 11792
7/31/2008	SUPERVISOR:	KEN WARREN		.,			MD:
	7:00 -			33	Α		7 AM FLBK REPORT: CP 1700#, TP 1700#, 18/64" CK, 43 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 3249 BBLS LEFT TO RECOVER: 10803
8/1/2008	SUPERVISOR:	KEN WARREN			i	- vanons	MD:
67172555	7:00 -	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		33	A		7 AM FLBK REPORT: CP 2500#, TP 1700#, 18/64" CK, 49 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 4407 BBLS LEFT TO RECOVER: 9645
8/2/2008	SUPERVISOR	KEN WARREN					MD:
G, Z, Z V U O	7:00 -	SER WANTEN		33	Α		7 AM FLBK REPORT: CP 3500#, TP 1800#, 18/64" CK, 43 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 5523 BBLS LEFT TO RECOVER: 8529
8/3/2008	SUPERVISOR:	KEN WARREN			<u>[</u>		MD:
	7:00 -			33	A		7 AM FLBK REPORT: CP 3600#, TP 1900#, 18/64" CK, 43 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 6555 BBLS LEFT TO RECOVER: 7497

STATE OF UTAH AMENDED REPORT FORM 8 DEPARTMENT OF NATURAL RESOURCES (highlight changes) DIVISION OF OIL, GAS AND MINING 5. LEASE DESIGNATION AND SERIAL NUMBER: ML-22652 6. IF INDIAN, ALLOTTEE OR TRIBE NAME WELL COMPLETION OR RECOMPLETION REPORT AND LOG 1a. TYPE OF WELL: 7. UNIT or CA AGREEMENT NAME OTHER UNIT #891008900A b. TYPE OF WORK: WELL NAME and NUMBER: WELL RE-ENTRY NBU 1021-2L OTHER 2. NAME OF OPERATOR: API NUMBER: KERR McGEE OIL & GAS ONSHORE LP 4304738843 3. ADDRESS OF OPERATOR: PHONE NUMBER: 10 FIELD AND POOL, OR WILDCAT 1368 S 1200 E STATE UT ZIP 84078 CITY VERNAL (435) 781-7024 NATURAL BUTTES 4. LOCATION OF WELL (FOOTAGES) 11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN AT SURFACE: 1849'FSL, 520'FWL NWSW 2 10S 21E AT TOP PRODUCING INTERVAL REPORTED BELOW: 12 COUNTY 13. STATE AT TOTAL DEPTH: UTAH UINTAH 14. DATE SPUDDED: 15. DATE T.D. REACHED: 16. DATE COMPLETED: 17. ELEVATIONS (DF, RKB, RT, GL): ABANDONED READY TO PRODUCE 🗸 5/20/2008 6/29/2008 8/1/2008 5055'GL 19. PLUG BACK T.D.: MD 9,427 18. TOTAL DEPTH: MD 9.480 20. IF MULTIPLE COMPLETIONS, HOW MANY? 21. DEPTH BRIDGE PLUG SET: MD TVD 22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) VCBL-CCL-GRI ARRAY COMPTAUE REST/ SDIDGA WAS WELL CORED? ио 🔽 YES -(Submit analysis) WAS DST RUN? ио 🔽 YEŞ (Submit report) DIRECTIONAL SURVEY? NO 🔽 YES (Submit copy) 24. CASING AND LINER RECORD (Report all strings set in well) STAGE CEMENTER DEPTH CEMENT TYPE & HOLE SIZE SLURRY SIZE/GRADE WEIGHT (#/ft.) TOP (MD) BOTTOM (MD) CEMENT TOP ** AMOUNT PULLED NO. OF SACKS VOLUME (BBL) 20" 36.7# 14" STL 40 28 12 1/4" 36# 9 5/8 J-55 2.250 750 7 7/8" 4 1/2 **I-80** 11.6# 9.480 1590 25. TUBING RECORD SIZE DEPTH SET (MD) PACKER SET (MD) SIZE DEPTH SET (MD) PACKER SET (MD) DEPTH SET (MD) PACKER SET (MD) 2 3/8" 9.825 26. PRODUCING INTERVALS 27. PERFORATION RECORD FORMATION NAME TOP (MD) BOTTOM (MD) TOP (TVD) BOTTOM (TVD) INTERVAL (Top/Bot - MD) NO. HOLES SIZE PERFORATION STATUS (A) MESAVERDE 9,825 9.825 9.390 9,390 0.36 160 Squeezed Open (B) Open Squeezed (C) Open Squeezed (D) Open Squeezed 28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. DEPTH INTERVAL AMOUNT AND TYPE OF MATERIAL 9825'-9390' PMP 14,052 BBLS SLICK H2O & 510,336# 30/50 OTTOWA SD DIV. OF OIL, GAS & MINING 29. ENCLOSED ATTACHMENTS: 30. WELL STATUS: ELECTRICAL/MECHANICAL LOGS DIRECTIONAL SURVEY GEOLOGIC REPORT DST REPORT **PROD** SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION CORE ANALYSIS OTHER:

31. INITIAL PR	ODUCTION				INT	ERVAL A (As sho	wn in item #26)					
8/1/2008	RODUCED:	TEST DA 8/5/2			HOURS TESTEE): 24	TEST PRODUCTION RATES: →	N OIL – BBL:	GAS – MCF: 1,219	WATER - 1.10		PROD. METHOD: FLOWING
CHOKE SIZE: 18/64	TBG. PRES			I GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTIO RATES: →	OIL - BBL:	GAS - MCF: 1,219	WATER - 1,10	BBL:	INTERVAL STATUS: PROD
					INT	ERVAL B (As sho	wn in item #26)	-				
DATE FIRST PF	RODUCED:	TEST DA	ATE:		HOURS TESTED);	TEST PRODUCTION RATES: →	N OIL – BBL:	GAS - MCF:	WATER -	BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRES	SS. CSG. PR	RESS. AP	I GRAVITY	BTU GAS	GAS/OIL RATIO	24 HR PRODUCTIO RATES: →	N OIL – BBL:	GAS - MCF:	WATER -	BBL:	INTERVAL STATUS:
	- L 	<u>'</u>			INT	ERVAL C (As show	wn in item #26)			- L		
DATE FIRST PE	RODUCED:	TEST DA	ATE:		HOURS TESTED);	TEST PRODUCTION RATES: →	N OIL – BBL:	GAS - MCF:	WATER -	BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRES	SS. CSG. PR	ESS. AP	I GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTIO RATES: →	N OIL - BBL:	GAS - MCF:	WATER -	BBL:	INTERVAL STATUS:
		<u></u>	<u> </u>		INT	ERVAL D (As show	wn in item #26)	1.		- I		•
DATE FIRST PR	ODUCED:	TEST DA	ATE:		HOURS TESTED);	TEST PRODUCTION RATES: →	N OIL – BBL:	GAS MCF:	WATER -	BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRES	SS. CSG. PR	ESS. AP	I GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTIO RATES: →	N OIL – BBL:	GAS - MCF:	WATER -	BBL:	INTERVAL STATUS:
32. DISPOSITIO	ON OF GAS (Sold, Used for F	Fuel, Vented	, Etc.)			<u> </u>			<u> </u>		
33. SUMMARY	OF POROUS	ZONES (Includ	le Aquifers):	· · · · · ·				34. FORMATION	(Log) MARKERS:			
Show all importatested, cushion u						i tests, including de	pth interval					
Formation	on	Top (MD)	Bottom (MD)		Descript	tions, Contents, etc			Name		(1)	Top Measured Depth)
GREEN R MAHOGA WASATCI MESAVER	NY H	1,347 2,093 5,194 7,349	7,337 9,392									

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT SIGNATURE

TITLE REGULATORY ANALYST

8/19/2008

This report must be submitted within 30 days of

- · completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top - Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to:

Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

801-359-3940 Fax:

STATE OF UTAH RETMENT OF NATURAL RESOURCES

	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS AND MININ		5. LEASE DESIGNATION AND SERIAL NUMBER: ML-22652
SUNDF	RY NOTICES AND REPORTS C	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to d drill horizont	ill new wells, significantly deepen existing wells below current balaterals. Use APPLICATION FOR PERMIT TO DRILL form for	oottom-hole depth, reenter plugged wells, or to or such proposals.	7. UNIT or CA AGREEMENT NAME: UNIT #891008900A
TYPE OF WELL OIL WEI			8. WELL NAME and NUMBER: NBU 1021-2L
2. NAME OF OPERATOR: KERR McGEE OIL & G	AS ONSHORE LP		9. AP! NUMBER: 4304738843
3. ADDRESS OF OPERATOR:	CITY VERNAL STATE UT ZIP 840	PHONE NUMBER: (435) 781-7024	10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL		the control of the	COUNTY: UINTAH
FOOTAGES AT SURFACE: 184			COUNTY: CINTAIT
QTR/QTR, SECTION, TOWNSHIP, I	RANGE, MERIDIAN: NWSW 2 10S 21E		STATE: UTAH
11. CHECK AF	PROPRIATE BOXES TO INDICATE I	NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
✓ NOTICE OF INTENT	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION
(Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start:	CASING REPAIR	NEW CONSTRUCTION	TEMPORARILY ABANDON
	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR
	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL
(Submit Original Form Only)	CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF
Date of work completion:	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	OTHER:
	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION	
THE OPERATOR PRO THE OPERATOR WILL THE EXISTING MESA	UESTS AUTHORIZATION TO RECOMPOSES TO COMPLETE THE WASATE COMMINGLE THE NEWLY WASATE FORMATIONS. HE ATTACHED RECOMPLETION PR	TCH AND THE EXISTING ME CH AND MESAVERDE INTER	SAVERDE FORMATION.
			- 1121a.1000
			Date: 11.20.2008
			Initials: <u>KS</u>
SHEIL	A UPCHEGO	TITLE REGULATORY	ANALYST
SIGNATURE	uponeyo we	DATE 11/10/2008	
(This space for State use only)	APPROVED BY THE STA OF UTAH DIVISION O OIL, GAS, AND MININ DATE: 1 24 0 0	G —	RECEIVED NOV 1 2 2008
(5/2000)	BY: (ause 173-14)	DIV. OF	OIL, GAS & MINING

Name: NBU 1021-2L

Location: NW SW Sec 2 T10S R21E

Uintah County, UT

Date:

10/28/2008

ELEVATIONS:

5055 GL

5069 KB

TOTAL DEPTH:

9473

PBTD: 9427

SURFACE CASING: PRODUCTION CASING:

9 5/8", 36# J-55 ST&C @ 2222' 4 1/2", 11.6#, I-80 LT&C @ 9471'

Marker Joint 4570-4584'

TUBULAR PROPERTIES:

	BURST	COLLAPSE	DRIFT DIA.	CAPACITIES	
	(psi)	(psi)	(in.)	(bbl/ft)	(gal/ft)
2 3/8" 4.7# J-55	7,700	8,100	1.901"	0.00387	0.1624
tbg					
4 ½" 11.6# I-80	7780	6350	3.875"	0.0155	0.6528
(See above)					
2 3/8" by 4 ½"				0.0101	0.4227
Annulus					

TOPS:

1347' Green River

2093' Mahogany

4572' Wasatch

7349' Mesaverde

Estimated T.O.C. from CBL @1000

GENERAL:

- A minimum of 30 tanks (cleaned lined 500 bbl) of recycled water will be required. Note: Use biocide in tanks and the water needs to be at least 45°F at pump time.
- All perforation depths are from Halliburtons Induction-Density-Neutron log dated 06/30/2008
- 7 fracturing stages required for coverage.
- Procedure calls for 7 CBP's (8000 psi) and 1 Flow Through Plug
- Calculate open perforations after each breakdown. If less than 60% of the perforations appear to be open, ball out with 15% HCl.
- Put scale inhibitor 3 gals/1000 gals (in pad and ½ the ramp) and 10 gals/1000 gals in all flushes except the final stage. Remember to pre-load the casing with scale inhibitor for the very first stage with 10 gpt.
- 30/50 mesh Ottawa sand, Slickwater frac.
- Maximum surface pressure 6200 psi.
- Flush volumes are the sum of slick water and acid used during displacement (include scale
 inhibitor as mentioned above). DO NOT OVERDISPLACE. Stage acid and scale inhibitor
 if necessary to cover the next perforated interval.

- Service companies need to provide surface/production annulus pop-offs to be set for 1500 psi for each frac.
- Pump 20/40mesh resin coated sand last 5,000# of all frac stages
- Tubing Currently Landed @~8924
- Originally completed on 7/28/2008

Existing Perforations:

MESAVERDE 83	888	8390	4	8
MESAVERDE 84	130	8432	4	8
MESAVERDE 84	172	8474	4	8
MESAVERDE 85	524	8526	4	8
MESAVERDE 85	560	8562	4	8
MESAVERDE 86	686	8688	4	8
MESAVERDE 87	746	8748	4	8
MESAVERDE 87	778	8780	4	8
MESAVERDE 88	302	8804	4	8
MESAVERDE 88	340	8842	4	8
MESAVERDE 89	954	8958	4	16
MESAVERDE 90	086	9090	4	16
MESAVERDE 9	152	9154	4	8
MESAVERDE 92	262	9264	4	8
MESAVERDE 93	306	9308	4	8
MESAVERDE 93	318	9320	4	8
MESAVERDE 93	332	9334	4	8
MESAVERDE 93	388	9390	4	8

PROCEDURE:

- 1. MIRU. Control well with recycled water and biocide as required. ND WH, NU BOP's and test.
- 2. TOOH with 2-3/8", 4.7#, J-55 (or N-80) tubing (currently landed at ~8924'). Visually inspect for scale and consider replacing if needed.
- 3. If tbg looks ok consider running a gauge ring to 8106 (50' below proposed CBP). Otherwise P/U a mill and C/O to 8106 (50' below proposed CBP).
- 4. Set 8000 psi Flow Through Plug at \sim 8308'. Pressure test BOP and casing to 6000 psi. .
- 5. Perf the following with 3-3/8" gun, 23 gm, 0.36"hole:

Zone	From	To	spf	# of shots
MESAVERDE	8160	8162	4	8
MESAVERDE	8250	8254	4	16
MESAVERDE	8274	8278	4	16

6. Breakdown perfs and establish injection rate (<u>include scale inhibitor in fluid</u>). Fracture as outlined in Stage 1 on attached listing. Under-displace to ~8110' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

7. Set 8000 psi CBP at ~8066'. Perf the following 3-3/8" gun, 23 gm, 0.36"hole:

Zone From To spf # of shots MESAVERDE 7974 7976 4 8 MESAVERDE 8028 8036 4 32

- 8. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 2 on attached listing. Under-displace to ~7930' and trickle 250gal 15%HCL w/ scale inhibitor in flush. NOTE TIGHT SPACING
- 9. Set 8000 psi CBP at ~7920'. Perf the following 3-3/8" gun, 23 gm, 0.36"hole:

of shots Zone From To spf 8 **MESAVERDE 7700** 7702 4 8 MESAVERDE 7750 4 7752 7800 4 8 MESAVERDE 7798 8 7850 4 MESAVERDE 7848 8 **MESAVERDE 7888** 7890 4

- 10. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~7650' and trickle 250gal 15%HCL w/ scale inhibitor in flush.
- 11. Set 8000 psi CBP at \sim 7612'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone From To spf # of shots MESAVERDE 7398 7403 4 20 MESAVERDE 7577 7582 4 20

- 12. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 4 on attached listing. Under-displace to ~7348' trickle 250gal 15%HCL w/ scale inhibitor in flush.
- 13. Set 8000 psi CBP at \sim 6300'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone From To spf # of shots WASATCH 6030 6032 4 8 WASATCH 6262 6270 4 32

- 14. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 5 on attached listing. Under-displace to ~5980' and trickle 250gal 15%HCL w/ scale inhibitor in flush.
- 15. Set 8000 psi CBP at \sim 5697'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

of shots To spf From Zone 12 WASATCH 5542 5546 3 3 9 5624 WASATCH 5621 3 21 5660 5667 WASATCH

- 16. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 6 on attached listing. Under-displace to ~5492' and trickle 250gal 15%HCL w/ scale inhibitor in flush.
- 17. Set 8000 psi CBP at \sim 5277'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone	From	To	spf	# of shots
WASATCH	5196	5201	4	20
WASATCH	5242	5247	4	20

- 18. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 7 on attached listing. Under-displace to ~5146' andflush only with recycled water.
- 19. Set 8000 psi CBP at ~5146'.
- 20. TIH with 3 7/8" mill, sliding sleeve, SN and tubing.
- 21. Mill plugs (DO NOT DRILL Flow Through PLUG @ 8308') and clean out to 8308. Land tubing at ±7944' and open sleeve unless indicated otherwise by the well's behavior. This well will NOT be commingled at this time.
- 22. RDMO
- 23. Clean out well with foam and/or swabbing unit until steady flow has been established from recomplete.
- 24. MIRU
- 25. Mill isolation plug and commingle well. Land tubing at ~8924'
- **26. RDMO**

For design questions, please call Curtis Caile, Denver, CO (406)-490-2742 (Cell) (720)-929-6194 (Office)

For field implementation questions, please call Robert Miller, Vernal, UT 4350781 7041 (Office)

NOTES:

This well was originally designed by Victor for 8 stages but had to be cut to five for the 30 tank limit. This recomplete is the last 3 stages of Victors design and 3 Wasatch stages.

Fluid per stage was reduced greatly to meet 30 tank limit.

Zone	Feet of Pay	Pe Top, ft.	rfs Bot., ft	SPF	Holes	Rate	Fluid	Initial ppg	Final ppg	Fluid	Volume gals	Cum Vol gais	Volume BBLs	Cum Voi BBLs	Fluid % of frac	Sand % of frac	Sand lbs	Cum. Sand lbs	Footage from CBP to Flush	inhii gal
MESAVERDE	G Pay	8160	8162	4	noies 8		Pump-in test	PP	PPS	Slickwater	gaie	0	0	0						
MESAVERDE MESAVERDE	1	8250 8274	8254 8278	4	16 16	0 50	ISIP and 5 min ISIP Slickwater Pad			Slickwater	17,250	17,250	411	411	15.0%	0.0%	0	0		52 52
MESAVERDE MESAVERDE	23		No perfs		"	50	Slickwater Ramp	0.25		Slickwater Slickwater	32,583	49,833 49,833	776 0	1,187 1,187	28.3%	16 8% 0.0%	20,365 0	20,365 20,365		49
MESAVERDE MESAVERDE	5		No perfs No perfs			50	SW Sweep Slickwater Ramp	1	1.5	Slickwater	32,583	82,417	776	1,962	28.3%	33.6%	40,729	61,094		49
MESAVERDE MESAVERDE	2 20		No perfs	1			SW Sweep Slickwater Ramp	0.5		Slickwater Slickwater	5,250 3,000	87,667 90,667	125 71	2,087		0.0% 2.5%	0 000,8	61,094 64,094		0
MESAVERDE	0		No pens		ĺ	50	Slickwater Ramp	1.5		Stickwater	32,583 5,294	120,250 125,544	776 126	2,863 2,989	28 3%	47.1%	57,021	121,115 121,115		0 52
MESAVERDE MESAVERDE	0				1	50	Flush (4-1/2") ISDP and 5 min ISDF	,			5,294	125,544	120	2,909				121,113		25
MESAVERDE	0				1													i		
MESAVERDE MESAVERDE	0									Sand laden \	olume	115,000								
	SR		# of Perf		40			,					FI	ush depth	8110	gal/ft	2,000 BP depth	2,106 8.066	lbs sand/ft 44	
				- exego	#0153	59.8	<< Above sums time	(min)	2000	3432,0191		2	. 0		Vieto)		17.38.77			1000
MESAVERDE MESAVERDE	12	7974 8028	7976 8036	4	6 32	Varied	Pump-in test IStP and 5 min ISIP			Slickwater		0	0	0						ŀ
MESAVERDE	1	0020	No perfs		-	50	Slickwater Pad			Slickwater	12,713	12,713	303	303	15.0%	0.0%	15.000	15,008		38
MESAVERDE MESAVERDE	2 32		No perfs		1		Slickwater Ramp SW Sween	0 25		Slickwater Slickwater	24,013	36,725 36,725	572 0	874 874	28.3%	16.7% 0.0%	15,008 0	15,008		0
MESAVERDE	1		No perfs		i	50	Slickwater Ramp	1	1.5	Skickwater	24,013	60,738	572	1,446	28.3%	33 3%	30,016	45,023 45,023		38
MESAVERDE MESAVERDE	2		No perfs No perfs				SW Sweep Slickwater Ramp	0.5		Slickwater Slickwater	5,250 3,000	65,988 68,988	125 71	1,571 1,643		0.0% 3.3%	3,000	48,023		0
MESAVERDE	4		No perís		İ	50	Slickwater Ramp	1.5		Slickwater	24,013	90,000	572	2,143	28.3%	46.7%	42,022	90,045 90,045		52
MESAVERDE MESAVERDE	0			i .		50	Flush (4-1/2") ISDP and 5 min ISDR				5,177	95,177 95,177	123	2,266	1			90,045		16
MESAVERDE	0			1							i									
MESAVERDE MESAVERDE	9									Sand laden \	 /alume	84,750		1						ļ
MESAVERDE													_		7930	gal/ft	1,500 BP depth	1,594	lbs sand/ft 10	Ì
100	57	CHUNNOS	# of Peri	is/stage [40		<< Above pump time	(min)	0.00000			73.73		ush depth	7930	ES-2300	obr depui	1,520		
MESAVERDE	9	7700			8	Varied	Pump-in test			Slickwater	[0	Ö	0						1
MESAVERDE MESAVERDE	10	7750 7798	7752 7800		8 A		ISIP and 5 min ISIP Slickwater Pad			Slickwater	10,350	10,350	246	246	15.0%	0.0%	0			3
MESAVERDE	1	7848	7850	1 4	8	50	Slickwater Ramp	0 25		Slickwater	19,550	29,900	465 0	712 712	28.3%	16.5%	12,219	12,219		2
MESAVERDE MESAVERDE	1	7888	7890 No perfs	4	6		SW Sweep Slickwater Ramp	0		Slickwater	19,550	29,900 49,450	465	1,177	28.3%	33.1%	24,438			2
MESAVERDE	3		No perfs			50	SW Sweep	Ó	0	Slickwater	5,250	54,700	125	1,302		0.0%	3,000	36,656		
MESAVERDE MESAVERDE	8		No perfs No perfs				Slickwater Ramp Slickwater Ramp	0.5 1.5		Slickwater Slickwater	3,000 19,550	57,700 74,250	71 465	1,374 1,768	26.3%	4.1% 46.3%	3,000	73,869	l .	
MESAVERDE	2		No perfs				Flush (4-1/2")		1	J. C. Mariel	4,994	79,244 79,244	119	1,887	/*		,	73,869		1
MESAVERDE MESAVERDE	3		No perfs No perfs		l		ISDP and 5 min ISD	P	ŀ			19,244				İ				Ι΄
MESAVERDE	5		No perfs						ĺ	Sand laden	/olume	69,000								
MESAVERDE	8		No peris		-					gano taden '	Jume	39,000] [gal/ft	1,000	1,071	ibs sand/ft	
	69	gaugecze	# of Per	fs/stage	40	35.4	<<. Above pump time	(men	100000 H	144,030,04		NU Cura da	F	lush depth	7650		CBP depth	1,612	38	to:
MESAVERDE	3				20	Varied	Pump-in test	- CONTROLS	- :0000 d 100.d h	Slickwater		0	٥	0	parts of the Annalysis of					1
MESAVERDE MESAVERDE	12		7582 No perfs	4	20		ISIP and 5 min ISIP Slickwater Pad			Stickwater	11,944	11,944	284	284	15 0%	0.0%	_ c	0		3
MESAVERDE	1		No perfs			50	Slickwater Ramp	0.25		Stickwater	22,560	34,504	537	822	28.3%	16.6%	14,100	14,100] 3
MESAVERDE	5		No perfs			50	SW Sweep Slickwater Ramp	0		Slickwater	22,560	34,504 57,065	0 537	822 1,359	28.3%	0.0% 33.3%	28,201	14,100		3
MESAVERDE MESAVERDE	2		No perfs No perfs		1		Slickwater Ramp SW Sweep	0	0	Slickwater	5,250	62,315	125	1,484	20.376	0.0%	C	42,301	1	
MESAVERDE	1		No perfs	1	1	50	Slickwater Ramp	0.5	1.5	Slickwater	3,000	65,315	71	1,555	20.20	3.5% 46.6%	3,000 39,481			
MESAVERDE MESAVERDE	1		No perís No perís	1			Slickwater Ramp Flush (4-1/2")	15	2	Slickwater	22,560 4,797	84,875 89,672	537 114	2,021 2,135	28.3%	46.6%	39,467	84,782		
MESAVERDE	0		No perfs	1		"	ISDP and 5 min ISD	P				89,672	1	'						1
MESAVERDE MESAVERDE	15		No perfs						l											
MESAVERDE	Č									Sand laden	Volume	79,625				gal/ft	1,750	1 863	lbs sand/ft	
	46		# of Per	 is/stage	40					MC00000 MC-00000		gave mensossam varion		lush depth	44,000,000,000,000	(CBP depti	6,300	1,848	
WASATCH			6032	2 4	Ε	#0.4 Varied	<< Above gump limi Pump-in test	(min)		Stickwater		0	} 8	o o		1		1		13.000
WASATCH	Ċ		6270		32	2 0	ISIP and 5 min ISIP						1	1	15.00	0.00				١,
WASATCH			No peris		1		Slickwater Pad Slickwater Ramp	0 25		Slickwater	3,600 6,800		86 162	86 248	15 0% 28.3%	0 0% 17 2%	4,250	4,250		1
WASATCH	10		No perfs	1		50	SW Sweep	0		Slickwater	0	10,400	0	248		0.0%		4,250	1	
WASATCH	Ċ			1		50	Slickwater Ramp	1 0		Slickwater Slickwater	6,800	17,200 17,200	162	410 410	28 3%	34.5% 0.0%	8,500			
WASATCH	0			-		50	SW Sweep Slickwater Ramp	0.5	1.5	Slickwater	0	17,200	0	410	i	0.0%	[6	12,750	4	1
WASATCH	€					50	Slickwater Ramp Flush (4-1/2")	1.5	2	Slickwater	6,800 3,904		162	571 664	28.3%	48.3%	11,900	24,650 24,650	3	
WASATCH WASATCH	1)		1	1	١	ISDP and 5 min ISC	P	1		1	27,904				1				
WASATCH WASATCH	(1	1		1			1									1
WASATCH	Č			1	1			ĺ	1	Sand laden	Volume I	24,000				gal/fi	1,600	1.541	lbs sand/ft	
	11	5	# of Per	i ris/stage	4	0					96271200000000000		F	lush depth	5980		CBP depti		283	
WASATCH		6542	2 554	6 3	3 12	11.4 2 Varied	<< Above pump tim Pump-in test	e (mm)		Slickwater		0	į c	0		l			A COLOREST AND ST	or t (*1000000
WASATCH	17	662	562	4 3	3 9	9 (ISIP and 5 min ISIP	1	}	Slickwater	9,450	9,450	225	225	15.0%	0.0%	, ,	0	,	:
WASATCH			No perfs	7 3	3 2		Slickwater Pad Slickwater Ramp	0.25		1 Slickwater	17,850	27,300	425	650	28 3%	17.2%	11,15	6 11,156		
WASATCH	1		No perfs		1	50	SW Sweep	1		Slickwater	17,850	27,300) (650	28.3%	0.0% 34.5%		0 11,156 3 33,469	ál	1
WASATCH WASATCH	1		No perfs	-		50 50	Slickwater Ramp SW Sween	2	0 0	Slickwater Slickwater	17,850	45,150	1 0	1,075	20.3%	0.0%	, ·	0 33,469	9[1
WASATCH	-)				50	Slickwater Ramp	0.5	1.5	5 Slickwater 2 Slickwater	17,850		425		28.3%	0.0%		0 33,469 8 64,706	6	
WASATCH WASATCH						50	Slickwater Ramp Flush (4-1/2")		1 '	Sickwater	3,585	66,585	85	1,585	20.3%	1	1	64,706	3	-
WASATCH)		ļ	1		ISDP and 5 min ISD	P		1	1	66,585	`[1						'
WASATCH WASATCH		,									1.		ŀ	1		1				
WASATCH	1	3			1			1		Sand laden	volume	63,000	1	1		gal/f			ibs sand/ft	
	4		# of Pe	rfe/stag	4								ļ F	lush depth	5492	100000	CBP depti	n 5,277	215	
WASATCH	2		5 620	1 4		30.0 0 Vaned	Pump-in test	n P OSTSON		Slickwater	1	† c) (Ô	100000000000000000000000000000000000000		- 100 marin (100 mm)		7	
WASATCH	1	524				0] (ISIP and 5 min ISIP	1	1	Clieb	9,713	9,713	23.	231	15 0%					1
WASATCH		ם ב					Slickwater Pad Slickwater Ramp	0 25	5	Slickwater 1 Slickwater	18,346	28,058	437	668	28.3%	16 5%	11,46	6 11,466	s	
WASATCH		3		1	1	50	SW Sweek) (0 Slickwater	1 0	28,058	3 (28.3%	0.0%		0 11,466		
WASATCH WASATCH	1						Slickwater Ramp SW Sweep	+ 6) (5 Slickwater 0 Slickwater	18,346 5,25 0	51,654	1 125	1,230	1	0 0%	s I	0 34,39	3	
WASATCH		Ó				50	Slickwater Ramp	0.5	5 1:	5 Slickwater	3,000	54,654	1 7	1,301	1	4 3%				
		3				5	Slickwater Ramp Flush (4-1/2")	1.5	1	2 Slickwater	18,346 3,359				28.3%	46.2%	\$2,10	69,50		L
WASATCH		0				1 3	ISDP and 5 min ISC	op!	1		5,500	73,359			1		1	1		
		Ď				1			1	1		1	1							
WASATCH WASATCH WASATCH WASATCH				1	1	1	1	1	1	Sand laden	Volume	64,750			1	1		1	.1	l
WASATCH WASATCH WASATCH		0		ļ	1			-		Cunt Indon			1		I .			0 107	Rithe sande	
WASATCH WASATCH WASATCH WASATCH WASATCH		D	# af P-] .	40	ļ			June 1200	}		į.	Flush depth	5146	ga\/1	t 1,76 CBP dept		B lbs sand/ft 0	1010 10 100000
WASATCH WASATCH WASATCH WASATCH	,	D 7	# of Pe			333								Flush depth		gal/i		h 5,146	0	LOC

NBU 1021-2L Perforation and CBP Summary

1 SEAVERDE 010 0152 4 8 0157 10 8 MESAVERDE 0250			Perfo	orations					_	
MESAVERDE 010 6152 4 0 8151.5 10 0	Stage		Top, ft	Bottom, ft	SPF	Holes			ture Covera	ge
MESAVERDE \$270 \$274 4 16 \$1915 to 8 MESAVERDE \$274 4 16 \$1926 to 8 \$105						<u>-</u>			T	0100.5
MESAVERDE 9274 976 4 16 8194 10 8 8 9 10 8 10 8 10 8 10 8 10 8 10 8 10 8 10 10	1									8162.5 8182.5
MESAVERDE No perfs										8184
MESAVERDE No perfe 9274.5 to 8 MESAVERDE No perfe 8795.5 to 8 MESAVERDE No perfe 8309.5 to 8 MESAVERDE No perfe 8309.5 to 8 MESAVERDE No perfe 40 CBP DETTI 0.056			8274		4	16				8273.5
MESAVERDE No perfe										8273.5
MESAVERDE No perfs 830.5 10										8279.5
MESAVERDE										
# OF Perfectage 40 C8P DEFTH 8,066 774 7376 4 8 7386.5 10 7 MEANERDE 7374 7376 4 8 7386.5 10 7 MEANERDE 8028 8038 4 32 7,994 10 7 7 7 7 7 7 7 7 7										8311 8345
MESAVERDE 7914 7976 4 8 7986.5 10 7 MESAVERDE 8028 8036 4 32 7984 10 MESAVERDE 8028 8036 4 32 7984 10 MESAVERDE 8028 8036 4 32 7984 10 MESAVERDE 8086.5 10 0 MESAVERDE 7700 770.2 4 8 7788.6 10 0 MESAVERDE 7798 7800 4 8 7788.6 10 0 MESAVERDE 7798 7800 4 8 7789.5 10 0 MESAVERDE 7788 7895 4 8 7789.5 10 772.5 10 MESAVERDE 7788 7895 4 8 7789.5 10 772.5 10 MESAVERDE 7888 7898 4 8 7789.5 10 772.5 10 MESAVERDE 7888 7898 4 8 7789.5 10 772.5 10 MESAVERDE 7888 7898 4 8 7789.5 10 772.5 10 MESAVERDE 7898 8 7898 4 8 7772.5 10 772.5 10 MESAVERDE 7898 8 7898 4 8 7772.5 10 772.5 10 MESAVERDE 8 8 8 7898 4 8 7772.5 10 772.5 10 MESAVERDE 8 8 8 7 8 8 7 8 8 7 8 8				No perfs						8345
ALEGAMEROP		# of Perfs/stage								
MESAVERDE 80.28 80.39 4 32 7.994 10 MESAVERDE No perfs 7.998 10 7 MESAVERDE No perfs 7.998 10 7 MESAVERDE No perfs 80.015 5 10 6 MESAVERDE No perfs 80.015 5 10 6 MESAVERDE No perfs 80.023 5 10 MESAVERDE No perfs 80.023 5 10 MESAVERDE No perfs 80.023 5 10 MESAVERDE No perfs 80.025 10 6 MESAVERDE 7.700 7.702 4 8 7.698 5 10 MESAVERDE 7.700 7.702 4 8 7.698 5 10 MESAVERDE 7.700 7.702 4 8 7.698 5 10 MESAVERDE 7.750 7.762 4 0 7.702 10 7.7	And the second second				and the second second					
MESAVERDE No perfs 7988 10 7 MESAVERDE No perfs 9016.5 10 8 MESAVERDE No perfs 9025.5 10 9 MESAVERDE NO perfs 9 MESAVERDE NO p	2									7978.5
MESAVERDE No perfs 9791 10 77			8028		4	32				7984
MESAVERDE No perfs 0.018.5 to 8										7988.5
MESAVERDE No perfs 8081.5 10 MESAVERDE NO perfs 9096 10 8 MESAVERDE NO perfs 9096 10 8 MESAVERDE NO perfs 9096 10 8 MESAVERDE NO perfs 9096 10 8 MESAVERDE NO perfs 9 MESAVERDE 7700 7700 7700 4 8 7690 10 7700 7700 7700 4 8 7690 10 7700 7700 7700 4 8 7690 10 7700 7700 7700 4 8 7690 10 7700 7700 7700 7700 4 8 7690 10 7 7690 10 7 7700 7700 7700 7700 7700 7700 77										7992.5
MESAVERDE No perfs 8086 to 8										8048.5 8054
MESAVERDE No perfs 8088 10 8										
MISAVERDE No perfs 40										8083
### SOF Perfishing ### SOF Perfish ### SOF Perfishing ### SOF Perfishi										8089.5
Seavering				No perfs						8098.5
S MESAVERDE 7700 7702 4 8 7698.6 10										
MEBAYERDE						****				7005
MESAVERDE 7798 7800 4 8 7699 to 7 MESAVERDE 7888 7890 4 8 7720 to 7 MESAVERDE N898 7890 4 8 7720 to 7 MESAVERDE No perfs 17728 to 7 MESAVERDE No perfs 77740 to 7 MESAVERDE No perfs 77700 to 7 MESAVERDE No perfs 7777.5 to 7 MESAVERDE No perfs 7797.5 to 7 MESAVERDE No perfs 7797.5 to 7 MESAVERDE No perfs 7797.5 to 7 MESAVERDE No perfs 7893 to 7 7 7 7625 to 7 7 7 7 7	3									7695
MESAVERDE 7849 7650										7698
MESAVERDE 7888 7890 4 8 7720 to 77		MESAVERDE	7798							7708.5
MESAVERDE No perfs 7723.5 to 7		MESAVERDE								7719
MESAVERDE No perfs 7728 10 MESAVERDE No perfs 7748, 5 10 MESAVERDE No perfs 7779, 5 10 MESAVERDE No perfs 7779, 5 10 MESAVERDE No perfs 7797, 5 10 MESAVERDE No perfs 7797, 5 10 MESAVERDE No perfs 7797, 5 10 MESAVERDE No perfs 7891, 6 10 MESAVERDE No perfs 7891, 6 10 MESAVERDE No perfs 7892, 10 7 MESAVERDE No perfs 7893, 5 10 7 MESAVERDE No perfs 7893, 5 10 7 MESAVERDE No perfs 7893, 5 10 7 MESAVERDE No perfs 7892, 10 7 MESAVERDE No perfs 7892, 10 7 MESAVERDE No perfs 7892, 10 7 MESAVERDE No perfs 7892, 10 7 MESAVERDE No perfs 7407, 10 7 MESAVERDE No perfs 7409, 5 10 MESAVERDE No perfs 7409, 5 10 MESAVERDE No perfs 7449, 5 10 MESAVERDE No perfs 7450, 5 10 7 MESAVERDE No perfs 7450, 5 10 10 MESAVERDE No		MESAVERDE	7888	7890	4	8				7720.5
MESAVERDE No perfs 7748.5 to MESAVERDE NO perfs 7760 to MESAVERDE NO perfs 7770.5 to 7771.5 to 77 MESAVERDE NO perfs 7791.5 to 77 MESAVERDE NO perfs 7791.5 to 77 MESAVERDE NO perfs 7891.5 to 77 MESAVERDE NO perfs 7893.5 to 77 MESAVERDE NO perfs NO perfs 7893.5 to 77 MESAVERDE NO perfs NO perfs 7893.5 to 77 MESAVERDE NO perfs 7892.5 to 77 MESAVERDE NO perfs 77 MESAVERDE NO perf		MESAVERDE		No perfs						7723.5
MESAVERDE No perfs 7772.5 to 0 MESAVERDE No perfs 7772.5 to 0 MESAVERDE No perfs 7772.5 to 0 MESAVERDE No perfs 7797.5 to 7 MESAVERDE No perfs 7891 to 7 MESAVERDE No perfs 7891 to 7 MESAVERDE No perfs 7892 to 7 MESAVERDE No perfs 7892 to 7 MESAVERDE No perfs 7892 to 7 MESAVERDE No perfs 7892 to 7 MESAVERDE No perfs 7893 to 7 MESAVERDE No perfs 7893 to 7 MESAVERDE No perfs 7893 to 7 MESAVERDE No perfs 7893 to 7 MESAVERDE 7577 7592 to 7 MESAVERDE 7577 7592 to 7 MESAVERDE No perfs 7893 to 7 MESAVERDE NO perfs 7893 to 7 MESAVERDE NO perfs 7893 to 7 MESAVERDE NO perfs 7893 to 7 MESAVERDE NO perfs 7893 to 7 MESAVERDE NO perfs 7893 to 7 MESAVERDE NO perfs 7893 to 7 MESAVERDE NO pe		MESAVERDE								7731
MESAVERDE No perfs 7772.5 10 MESAVERDE No perfs 7797.5 10 7 MESAVERDE No perfs 7901.5 10 7 MESAVERDE No perfs 7839 10 7 MESAVERDE No perfs 7845 10 7 MESAVERDE No perfs 7855 10 7 MESAVERDE No perfs 7855 10 7 MESAVERDE No perfs 7855 10 7 MESAVERDE No perfs 7882 10 7 MESAVERDE No perfs 7882 10 7 MESAVERDE No perfs 7883 10 7 MESAVERDE No perfs 7892 10 7 MESAVERDE No perfs 7892 10 7 MESAVERDE 7898 7403 4 20 7349 10 MESAVERDE 7577 7552 4 20 7357 10 7 MESAVERDE No perfs 7592 4 20 7357 10 7 MESAVERDE No perfs 7407 10 7 MESAVERDE No perfs 7407 10 7 MESAVERDE No perfs 7409.5 10 MESAVERDE No perfs 7409.6 10 MESAVERDE No perfs 7414 10 7 MESAVERDE No perfs 7460 10 7 MESAVERDE No perfs		MESAVERDE								7756
MESAVERDE No perfs 7797.5 to 7 MESAVERDE No perfs 7801.6 to 7 MESAVERDE No perfs 7839 to 7 MESAVERDE No perfs 7956 to 7 MESAVERDE No perfs 7962 to 7 MESAVERDE No perfs 7983.5 to 7 MESAVERDE No perfs 40 CBP DEFTH 7,512 Perfs/ratage 7398 7403 4 20 7349 to 7 MESAVERDE 7398 7403 4 20 7357 to 7 MESAVERDE 7577 7592 4 20 7357.5 to 7 MESAVERDE No perfs 7407.1 to 7 MESAVERDE No perfs 7407.1 to 7 MESAVERDE No perfs 7440.1 to 7 MESAVERDE No perfs 7440.1 to 7 MESAVERDE		MESAVERDE		No perfs						7760
MESAVERDE No perfs 7901.6 10 7 MESAVERDE No perfs 7839 10 7 MESAVERDE No perfs 7946 10 7 MESAVERDE No perfs 7846 10 7 MESAVERDE No perfs 7845 10 7 MESAVERDE No perfs 7845 10 7 MESAVERDE No perfs 7882 10 7 MESAVERDE No perfs 7882 10 7 MESAVERDE No perfs 40 CBPDEPTH 7,812 4 MESAVERDE 7398 7403 4 20 7349 10 MESAVERDE 7398 7403 4 20 7349 10 MESAVERDE 7577 7552 4 20 7357 10 7 MESAVERDE No perfs 7407 10 7 MESAVERDE No perfs 7409.6 10 7 MESAVERDE No perfs 7409.6 10 7 MESAVERDE No perfs 7414 10 7 MESAVERDE No perfs 7446 10 7 MESAVERDE No perfs 7460 10 7 MESAVERDE No perfs 7460 10 7 MESAVERDE No perfs 7466.5 10 7 MESAVERDE No perfs 7466.5 10 7 MESAVERDE No perfs 7472 10 7 MESAVERDE No perfs 7470.5 10 7 MESAVERDE NO perfs 74		MESAVERDE		No perfs						7774
MEGAVERDE No perfs 78.39 to 7		MESAVERDE		No perfs						7800.5
MESAVERDE No perfs 7845 to 7		MESAVERDE		No perfs						7801.5
MESAVERDE No perfs 7856 to 7858		MESAVERDE		No perfs						7843.5
MESAVERDE No perfs 7882 to 7		MESAVERDE		No perfs						7852.5
MESAVERDE		MESAVERDE		No perfs						7857
## OF Perfs/stage ## OF PERFS ## OF PEFFS		MESAVERDE								7882.5
4 MESAVERDE 7398 7403 4 20 7349 to MESAVERDE 7577 7582 4 20 7357 to 7 7592 4 20 7359 to 7 7407 to 7 7 10 75 7 10 75 7 10 75 1		MESAVERDE		No perfs						7902.5
4 MESAVERDE 7398 7403 4 20 7349 to MESAVERDE 7577 7582 4 20 7357 to 7 7582 5 4 20 7357 to 7 7582 5 4 20 7357 to 7 7582 5 4 20 7359.5 to 7 7582 5 10 7 7582 5 10 7 7582 5 10 7 7407 to 7 7582 6 10 7 7407 to 7 7409.5 to 7 7409.5 to 7 7409.5 to 7 7409.5 to 7 7409.5 to 7 7409.5 to 7 7409.5 to 7 7414		# of Perfs/stage				40				
MESAVERDE 7577 7582 4 20 7367 10 10										
MESAVERDE		MESAVERDE	7398							7352
MESAVERDE No perfs 7407 to 7 MESAVERDE No perfs 7409.5 to MESAVERDE No perfs 7409.5 to MESAVERDE No perfs 7414 to MESAVERDE No perfs 7456 to 7 MESAVERDE No perfs 7456 to 7 MESAVERDE No perfs 7460 to 7 MESAVERDE No perfs 7460.5 to 7 MESAVERDE No perfs 7460.5 to 7 MESAVERDE No perfs 7490.5 to 7 MESAVERDE No perfs 7490.5 to 7 MESAVERDE No perfs 7490.5 to 7 MESAVERDE No perfs 7573.5 to 7 MESAVERDE MESAVERDE No perfs 7573.5 to 6 MESAVERDE MES		MESAVERDE	7577	7582	4	20				7364.5
MESAVERDE		MESAVERDE		No perfs						7402.5
MESAVERDE No perfs 7414 to		MESAVERDE								7407.5
MESAVERDE		MESAVERDE		No perfs						7414
MESAVERDE		MESAVERDE		No perfs						7414
MESAVERDE No perfs 7465.5 10 7		MESAVERDE		No perfs						7457.5
MESAVERDE No perfs 7472 to MESAVERDE No perfs 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7 7573.5 to 7 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7573.5 to 7 7 7 WASATCH No perfs A		MESAVERDE		No perfs						7460.5
MESAVERDE		MESAVERDE		No perfs						7465.5
MESAVERDE		MESAVERDE		No perfs						7473
# of Perfs/stage		MESAVERDE								7490.5
Section Sect		MESAVERDE		No perfs		ļ				7588.5
5 WASATCH 6030 6032 4 8 6028 to 6 WASATCH 6262 6270 4 32 6049 to WASATCH No perfs 6091 to 691 to WASATCH No perfs 40 CBP DEPTH 5,697 6 WASATCH 5542 5546 3 12 5499.5 to WASATCH 5621 5824 3 9 5538.5 to 5 WASATCH 5660 5667 3 21 5580.5 to 5 WASATCH No perfs 5613.5 to 5 5 5 WASATCH No perfs 5656.5 to 5 5 5 5 WASATCH No perfs 5659.5 to 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5						40				
WASATCH 6262 6270 4 32 6049 to				**************************************						9999 5
WASATCH No perfs 6091 to WASATCH No perfs 6261 to 6 # of Perfs/stage 40 CBP DEPTH 5,697 6 WASATCH 5542 5546 3 12 5499.5 to WASATCH 5621 5824 3 9 5539.5 to 5 WASATCH 5660 5667 3 21 5580.5 to 5 WASATCH No perfs 5613.5 to 5 5 5 WASATCH No perfs 5656.5 to 5 <td></td> <td>WASATCH</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>6033.5</td>		WASATCH								6033.5
WASATCH		WASATCH	6262		4	32	L			6049
# of Perfs/stage		WASATCH					ļ			6092
6 WASATCH 5542 5546 3 12 5499.5 to WASATCH 5621 5824 3 9 5539.5 to 5400 5600 5600 5600 3 21 5580.5 to 5500.5 to 5600 5600 5600 5600 3 21 5580.5 to 5600 5600 5600 5600 5600 5600 5600 560		WASATCH		No perfs						6270.5
6 WASATCH 5542 5546 3 12 5499.5 to WASATCH 5621 5824 3 9 5538.5 to WASATCH 5660 5667 3 21 5580.5 to WASATCH No perfs WASATCH No perfs WASATCH No perfs WASATCH No perfs WASATCH No perfs WASATCH No perfs WASATCH No perfs WASATCH No perfs WASATCH No perfs WASATCH S650.5 to WASATCH No perfs WASATCH No perfs WASATCH S659 to # of Perfs/stage 7 WASATCH 5196 5201 4 20 5194.5 to # of Perfs/stage 40 CBP DEPTH 5,146		# of Perfs/stage				40				
WASATCH 5621 5824 3 9 5538.5 to 5 WASATCH 5660 5667 3 21 5580.5 to 5 WASATCH No perfs 5613.5 to 5					1974			Just set		
WASATCH 5660 5667 3 21 5580.5 to 5 WASATCH No perfs 5613.5 to 5617.1 to 5 WASATCH No perfs 5656.5 to 5 7 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 </td <td></td> <td>WASATCH</td> <td>5542</td> <td>5546</td> <td>3</td> <td>12</td> <td></td> <td>5499.5</td> <td>to</td> <td>5502</td>		WASATCH	5542	5546	3	12		5499.5	to	5502
WASATCH 5660 5667 3 21 5580.5 to 5 WASATCH No perfs 5613.5 to 5 WASATCH No perfs 5656.5 to 5 WASATCH No perfs 5656.5 to 5 # of Perfs/stage 42 CBP DEPTH 5,277 WASATCH 5196 5201 4 20 5194.5 to 5 WASATCH 5242 5247 4 20 5239.5 to 5 # of Perfs/stage 40 CBP DEPTH 5,146 5 5		WASATCH	5621	5624	3	g	1			5555.5
WASATCH No perfs 5613.5 to WASATCH No perfs 5617 to 5 WASATCH No perfs 5656.5 to 5 WASATCH No perfs 5659 to 5 # of Perfs/stage 42 CBP DEPTH 5,277 WASATCH 5196 5201 4 20 5194.5 to 5 WASATCH 5242 5247 4 20 5239.5 to 5 # of Perfs/stage 40 CBP DEPTH 5,146 5 5			5660	5667	3	21				5580.5
WASATCH No perfs 5617 to 5 WASATCH No perfs 5656.5 to WASATCH No perfs 5659 to # of Perfs/stage 42 CBP DEPTH 5,277 WASATCH 5196 5201 4 20 5194.5 to WASATCH 5242 5247 4 20 5239.5 to # of Perfs/stage 40 CBP DEPTH 5,146									to	5614
WASATCH No perfs 5656.5 to WASATCH No perfs 5659 to # of Perfs/stage 42 CBP DEPTH 5,277 WASATCH 5196 5201 4 20 5194.5 to 5 WASATCH 5242 5247 4 20 5239.5 to 5 # of Perfs/stage 40 CBP DEPTH 5,146 5				No perfs						5627.5
WASATCH No perfs 5659 to # of Perfs/stage 42 CBP DEPTH 5,277 7 WASATCH 5196 5201 4 20 5194.5 to 5 WASATCH 5242 5247 4 20 5239.5 to 5 # of Perfs/stage 40 CBP DEPTH 5,146 5			1							5658
# of Perfs/stage				No perfs						5669
7 WASATCH 5196 5201 4 20 5194.5 to 5 5 WASATCH 5242 5247 4 20 5239.5 to 5 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6						42	?	CBP DEPTH		
7 WASATCH 5196 5201 4 20 5194.5 to 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5						0.742				
WASATCH 5242 5247 4 20 5239.5 to 5 4 4 5 5 6 6 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7					4	20		5194.5	to	5220.5
# of Perfs/stage 40 CBP DEPTH 5,146	,					20)	5239.5		5250.5
			1			40				
200										Y.
I budio		Totals				282	21			

Zono	Feet of Day	Pe Top, ft.	rfs Bot., ft	SPE	Holes	Rate BPM	Fluid Type	Initial ppg	Final ppg	Fluid	Volume gals	Cum Vol gals	Volume BBLs	Cum Vol	Fluid % of frac	Sand % of frac	Sand Ibs	Cum. Sand	CBP to Flush	Inhib gal,
Zone	6 G	8160	8162	4	8		Pump-in test	PPS	PPS	Slickwater	3	0	0	0		N. S. Caro				
MESAVERDE MESAVERDE	1	8250 8274	8254 8278	4	16 16	0	ISIP and 5 min ISIP Slickwater Pad			Slickwater	17,250	17,250	411	411	15.0%	0.0%	0	0		52 52
MESAVERDE	23		No perfs			50	Slickwater Ramp	0.25		Slickwater	32,583 0	49,833 49,833	776 0	1,187 1,187	28.3%	16.8% 0.0%	20,365	20,365 20,365		49
MESAVERDE MESAVERDE	5		No perfs No perfs	j		50 50	SW Sweep Stickwater Ramp	1		Slickwater Slickwater	32,583	82,417	776	1,962	28.3%	33.6%	40,729	61,094		49
MESAVERDE	2		No perfs	.		50 50	SW Sweep Slickwater Ramp	0.5		Slickwater Slickwater	5,250 3,000	87,667 90,667	125 71	2,087 2,159		0.0% 2.5%	0 3,000	61,094 64,094		0
MESAVERDE MESAVERDE	20 0		No perfs			50	Slickwater Ramp	1.5		Slickwater	32,583	120,250	776	2,863	28.3%	47.1%	57,021	121,115		0
MESAVERDE MESAVERDE	0					50	Flush (4-1/2") ISDP and 5 min ISDP	,			5,294	125,544 125,544	126	2,989				121,115		52 25
MESAVERDE	0						ISOF and Strike ISOF					.20,011								
MESAVERDE MESAVERDE	0									Sand laden V	 oiume	115,000								
MESAVERDE				l				İ				,		lush depth	8110	gal/ft	2,000 CBP depth		lbs sand/ft 44	
	58		# of Perfs	sistage	40	59.8	<< Above pump time	(nkn)		1.55		S	(20) parks		U.S		*			100
MESAVERDE	12	7974 8028	7976 8036	4	8 32		Pump-in test ISIP and 5 min ISIP			Slickwater		0	0							ĺ
MESAVERDE MESAVERDE	1	0020	No perfs	"	32		Slickwater Pad			Slickwater	12,713	12,713	303	303	15.0%	0.0%	0	0		38
MESAVERDE MESAVERDE	2 32		No perfs No perfs				Slickwater Ramp SW Sweep	0.25	1 0	Slickwater Slickwater	24,013	36,725 36,725	572 0	874 874	28.3%	16.7% 0.0%	15,008	15,008 15,008		36
MESAVERDE	1		No perfs				Slickwater Ramp	1	1.5	Slickwater	24,013	60,738	572	1,446	28.3%	33.3%	30,016	45,023		36
MESAVERDE	2		No perfs				SW Sweep Slickwater Ramp	0.5		Slickwater Slickwater	5,250 3,000	65,988 68,988	125 71	1,571 1,643		0.0% 3.3%	3,000			0
MESAVERDE MESAVERDE	4		No perfs No perfs		ľ		Slickwater Ramp	1.5		Slickwater	24,013	90,000	572	2,143	28.3%	46.7%	42,022	90,045		0 52
MESAVERDE MESAVERDE	0					50	Flush (4-1/2") ISDP and 5 min ISDF				5,177	95,177 95,177	123	2,266			1	90,045		16
MESAVERDE	0						index and o man room													
MESAVERDE MESAVERDE	0					ļ				Sand laden \	 'olume	84,750								
MESAVENDE					l									Flush depth	7930	gal/ft	1,500 CBP depth		lbs sand/ft 10	
	57		# of Perf	s/stage	40	42.9	<< Above pump time	(min)				75 S 5 4 4 4	200 E 200 E 200 E 200 E 200 E 200 E 200 E 200 E 200 E 200 E 200 E 200 E 200 E 200 E 200 E 200 E 200 E 200 E 2					1		
MESAVERDE	9		7702 7752	4		Varied	Pump-in test ISIP and 5 min ISIP			Slickwater		0	0	o						
MESAVERDE MESAVERDE	10	7750 7798	7752 7800	4	8	50	Slickwater Pad		1	Slickwater	10,350	10,350	246	246	15.0%	0.0%		0	1	3
MESAVERDE	1	7848	7850	4	8	50	Slickwater Ramp	0.25		Slickwater	19,550	29,900 29,900	465 0	712 712	28.3%	16.5% 0.0%		12,219		2
MESAVERDE MESAVERDE	1	7888	7890 No peris	4	8		SW Sweep Slickwater Ramp	1	1.5		19,550	49,450	465	1,177	28.3%	33.1%	24,438	36,656		2
MESAVERDE	3		No perfs			50	SW Sweep	0) c	Slickwater	5,250	54,700	125 71	1,302 1,374		0.0% 4.1%		36,656	i	
MESAVERDE MESAVERDE	8		No perfs No perfs				Slickwater Ramp Slickwater Ramp	0.5 1.5		Slickwater Slickwater	3,000 19,550	57,700 74,250	465	1,768	28.3%	4.1% 46.3%		73,869	ı l	(
MESAVERDE	2		No perfs			50	Flush (4-1/2") ISDP and 5 min ISDI				4,994	79,244 79,244	119	1,887			1	73,869	<u>'</u>	1:
MESAVERDE MESAVERDE	3		No perfs No perfs		ļ	1	TOUR MAJ THE ISDI	1]			, 5,244	1							
MESAVERDE MESAVERDE	5		No peris							Sand laden	 /olume	69,000						1		
LOAVERDE			•					1	1			[Flush depth	7650	gal/ft	CBP depth		lbs sand/ft 38	
	69		# of Peri	s/stage	40	35.4	< Above pump time	(min)						[7650		CBF Gept	17,012	NAMES AND ASSOCIATION OF THE PARTY OF THE PA	228
MESAVERDE	3				20	Varied	Pump-in test		[Slickwater		0	0	Ö			1		1	
MESAVERDE MESAVERDE	12		7582 No perfs	4	20		ISIP and 5 min ISIP Slickwater Pad	1		Slickwater	11,944	11,944	284	284	15.0%	0.0%				3
MESAVERDE	1		No perfs	1		50	Slickwater Ramp	0.25		Slickwater	22,560		537	822 822	28.3%	16,6%				3
MESAVERDE MESAVERDE	5		No perfs No perfs				SW Sweep Slickwater Ramp	1		Slickwater Slickwater	22,560	34,504 57,065	537	822 1,359	28.3%	0.0% 33.3%		1 42,301		3
MESAVERDE MESAVERDE	2		No peris No peris	1		50	SW Sweep	0) (Slickwater	5,250	62,315	125	1,484		0.0%	s) (42,301		1
MESAVERDE	1		No peris	}		50	Slickwater Ramp Slickwater Ramp	0.5		Slickwater Slickwater	3,000 22,560		71 537		28.3%	3.5% 46.6%		1 84,782	2	;
MESAVERDE MESAVERDE	1		No perfs No perfs				Flush (4-1/2")		1 '	- Concernates	4,797	89,672	114					84,782	<u> </u>	1
MESAVERDE MESAVERDE	15		No perfs No perfs		1		ISDP and 5 min ISD	۲	1	}	1	89,672	1		1		1			'
MESAVERDE)			1				-	Sand laden	/olume	79,625					1			
MESAVERDE														Flush depth	7348	gal/fi	CBP depti		lbs sand/ft 1,048	
	41		# of Per		40	40.4		(nin)	1				15022337		P.C.Y.			0,500	a to proceed the state of the	1000
WASATCH WASATCH	(32		Pump-in test ISIP and 5 min ISIP			Slickwater	1	"	1 "	0						
WASATCH	1		No perfs	1	J 3		Slickwater Pad		1	Slickwater	3,600				15.0%	0.0%	6 .05	0 (1 1
WASATCH	16		No perfs			50	Slickwater Ramp	0.25		1 Slickwater 0 Slickwater	6,800					17.2%		0 4,250 0 4,250		1
WASATCH WASATCH	(1	50	SW Sweep Slickwater Ramp	1 1	1 1.5	5 Slickwater	6,800	17,200	162	410	28.3%	34.5%	8,50	0 12,750	p	1
WASATCH)		1		50	SW Sweep Slickwater Ramp	0.5		Slickwater Slickwater						0.0%		0 12,750 0 12,750		
WASATCH WASATCH)				50	Slickwater Ramp	1.5		2 Slickwater	6,800	24,000	162	571	28.3%	48.3%) l	ا .
WASATCH)				50	Flush (4-1/2") ISDP and 5 min ISD	P		1	3,904	27,904 27,904		664				24,034	1	
WASATCH		ò								1			1					1		1
WASATCH WASATCH)								Sand laden	l Volume	24,000							1 1000	
	1		# of Per	fs/stage	. 4		1							 Flush depth		gal/f	CBP dept		libs sand/ft 283	
MAGATON					T	11.4 2 Varied	<< Above pump time Pump-in test	e (min)	1	Slickwater	1			0						
WASATCH WASATCH	1	3 5542 7 562			3 9	e	Pump-in test ISIP and 5 min ISIP				1	'								
WASATCH		5660	5667			1 5	Slickwater Pad		_	Slickwater	9,450 17,850						~	~	6	
WASATCH WASATCH	1	1	No perfs No perfs				Slickwater Ramp SW Sweep	0.2		1 Slickwater 0 Slickwater	1 0	27,300) (650		0.09	×6	0 11,15	6	
WASATCH		2	No perfs			5	Slickwater Ramp			5 Slickwater 0 Slickwater	17,850				28.3%	34.59		3 33,46 0 33,46		
WASATCH WASATCH	1	0	No perfs			5	Slickwater Ramp	0.	5 1.	5 Siickwater		45,150) (1,075	5	0.09	×.	0 33,46	9	
WASATCH		0				5	Slickwater Ramp Flush (4-1/2")	1.	5	2 Slickwater	17,856 3,589				28.3%	48.39	× 31,23	64,70 64,70		
WASATCH		0			1	,	ISDP and 5 min ISD	OP	1		1 3,56	66,58		,,550				1	1	
WASATCH		0		1							1				1				1	
WASATCH WASATCH		0 0			1			1]	Sand laden	Volume	63,000	9			gati	n 1,50	0 154	1 lbs sand/ft	1
	4	2	# of Per	rfs/stage	. 4	2					1	1		Flush dept			CBP dept	th 5,277	215	SE SECTION .
					1	30.0			.	Pliatounter			0	0 0						o possili
7 WASATCH WASATCH		6 519 1 524			4 2		Pump-in test 0 IStP and 5 min ISIF	,		Slickwater	1		1		1					
WASATCH		0	_ 524	Ί.	-	5	O Slickwater Pad	1		Slickwater	9,71							0 66 11,46	6	
WASATCH		0			1		0 Slickwater Ramp 0 SW Sweep	0.2		1 Slickwater 0 Slickwater	18,34	6 28,05 0 28,05		0 668	3	6 16.5°	%	0 11,46	6	
WASATCH		0 0				5	0 Slickwater Ramp		1 1	.5 Slickwater	18,34	6 46,40	4 43	7 1,105	5 28.31	6 33.0	% 22,93	34,39	8	
WASATCH		0		1		5	0 SW Sweep		0 1	0 Slickwater 5 Slickwater	5,25 3,00			5 1,230 1 1,301	1	0.0° 4.3°		0 34,39		
WASATCH WASATCH		0			1		0 Slickwater Ramp 0 Slickwater Ramp	0.		.5 Slickwater 2 Slickwater	18,34	70,00	0 43	7 1,667	7 26.39			05 69,50	14	
WASATCH		0		-	1		0 Flush (4-1/2") ISDP and 5 min ISI				3,35		9 8	0 1,74	7		1	69,50	14	-
WASATCH WASATCH		0				1	IODE BING O MIN ISI	-				.5,55			Ì					
WASATCH		0		1					1	Sand lader	 Volume	64,75	0 /				1			
WASATCH					.			1		Sano mader				 Flush depti	h 5146	gal	m 1,71 CBP dep	50 1,87 th 5,146	8 lbs sand/ft 0	LO
		17	# of Pe	rfs/stag		33.3														gjij)
	7.53.55.25.25 3:	00 common oper op	ucos cambolitado	ASSESSED FOR STREET	21						Total Fluid		8 gals 9 bbls	13,27	3 bbls		Total Sar	nd 528,67	70	
Totals													winnte							

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL. GAS AND MINING 5. LEASE DESIGNATION AND SERIAL NUMBER: ML-22652 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: SUNDRY NOTICES AND REPORTS ON WELLS 7. UNIT or CA AGREEMENT NAME: Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. UNIT #891008900A 8. WELL NAME and NUMBER: 1. TYPE OF WELL OIL WELL GAS WELL 🗸 OTHER NBU 1021-2L 2. NAME OF OPERATOR: 9 APINUMBER KERR McGEE OIL & GAS ONSHORE LP 4304738843 3. ADDRESS OF OPERATOR: PHONE NUMBER: 10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES STATE UT 710 84078 (435) 781-7024 1368 SOUTH 1200 EAST VERNAL 4. LOCATION OF WELL FOOTAGES AT SURFACE: 1849'FSL, 520'FWL COUNTY: UINTAH QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSW 2 10S 21E STATE: **UTAH** CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 11. TYPE OF SUBMISSION TYPE OF ACTION ACIDIZE DEEPEN REPERFORATE CURRENT FORMATION NOTICE OF INTENT FRACTURE TREAT SIDETRACK TO REPAIR WELL (Submit in Duplicate) ALTER CASING Approximate date work will start: CASING REPAIR NEW CONSTRUCTION TEMPORARILY ABANDON CHANGE TO PREVIOUS PLANS OPERATOR CHANGE TUBING REPAIR CHANGE TUBING PLUG AND ABANDON VENT OR FLARE SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK WATER DISPOSAL (Submit Original Form Only) PRODUCTION (START/RESUME) WATER SHUT-OFF CHANGE WELL STATUS Date of work completion: COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE OTHER: CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION

DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

THE OPERATOR HAS PERFORMED THE RECOMPLETION ON THE SUBJECT WELL LOCATION. THE OPERATOR HAS COMPLETED THE NEWLY WASATCH AND MESAVERDE FORMATIONS, AND HAS COMMINGLED WITH THE EXISITING MESAVERDE FORMATIONS. THE OPERATOR HAS PLACED THE SUBJECT WELL ON PRODUCTION ON 01/22/2009 AT 11:00 AM.

PLEASE REFER TO THE ATTACHED RECOMPLETION CHRONOLOGICAL WELL HISTORY.

	·
NAME (PLEASE PRINT) SHEILA UPCHEGO	TITLE REGULATORY ANALYST
SIGNATURE MUNICIPALITY	DATE 2/5/2009
	RECEIVED

(This space for State use only)

FEB 0 9 2009

DIV. OF OIL, GAS & MINING

				0	perat	ion S	umm	ary Repor	t
Well: NBU 102	21-2L			Spud C	onductor	: 5/20/20	08	Spud Date: 5/	/23/2008
Project: UTAH				Site: UII	NTAH				Rig Name No: GWS 1/1
Event: RECON	/PLETION	·		Start Da	te: 1/5/2	009			End Date: 1/15/2009
Active Datum: Level)	RKB @5,0	69.00ft (above Mean	Sea	UWI: 0	/10/S/21/	E/2/0/N	WSW/6/PM/S/1	,849.00/W/0/520.00/0/0
Date	Tin Start-	-End	Duration (hr)	Phase	Code	Subco de2	P/U	MD From (ft)	Operation
1/12/2009	7:00 -		0.50	COMP	48		Ρ		HSM
4440/0000	7:30 -		8.50	COMP	31	1	P		ROAD RIG F/ NBU 1021-2L. MIRU RIG SPOT EQUIP. WELL PSI 230#. OPEN WELL T/ PROD TANK BLOW WELL DOWN. RIG PUMP T/ TBG. PUMP 30 BBLS 2% KCL T/ CONT WELL. ND WH, NUBOP. RIG PUMP T/ CSG. PUMP 45 BBLS 2% KCL. T/ CONT WELL. UNLAND TBG. LD 4 1/16 TBG HNGR. (4 1/16 HNGR WAS GAULDED) POOH STD 244 JTS, 2 3/8, J-55 & LD 37 JTS, 2 3/8 J-55 TBG FOR DRL OUT. LD BHA. (POBS) SWI. PUT WELL DOWN SALES LINE FOR NITE. SDFN.
1/13/2009	7:00 -		0.50	COMP	48	-	Р		HSM.
	7:30 -	18:00	10.50	COMP	36	В	P		OPEN WELL 280#. BLOW WELL T/ PROD TANK. RIG PUMP T/ CSG VALVE. PUMP 20 BBLS 2%. T/ CONTOL WELL. ND BOP. NU FRAC VALVES. MIRU CUTTERS W.L. & B&C QUICK TEST. PU 4 1/2, 8K FRAC PLUG. RIH SET @ 8296'. POOH. RIG PUMP T/ CSG VALVE. FILL CSG W/ 85 BBLS 2%, PSI T/ 2500# W/ RIG PUMP. CONT PSI T/ 6200# W/ B&C QUICK TEST. GOOD TEST. BLEED OFF PSI T/ PIT. RDMO B&C QUICK TEST. STG 1)PU 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH PERF F/ 8160'-62', 4 SPF, 8 HOLES. 8250'-54', 4 SPF, 16 HOLES. 8274'-78', 4 SPF, 16 HOLES. 8274'-78', 4 SPF, 16 HOLES. POOH. X-OVER FOR FRAC CREW. PSI TEST WEATHERFORDS PUMP LINE T/ 7200# GOOD TEST. OPEN WELL 450#. BEG PUMP, BRK @ 3764# @ 2.8 BPM. SD ISIP 2659#, FG .76. BEG FRAC PUMP 116,238#, 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 3179#, FG .82. X-OVER FOR W.L. STG 2)PU 4 1/2, 8K BAKER CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8056', P/U PERF F/ 8028'-36', 4 SPF, 32 HOLES.
									7974'-76', 4 SPF, 8 HOLES. POOH. X-OVER FOR FRAC CREW. OPEN WELL 0#. BEG PUMP, BRK @ 5704# @ 2.7 BPM. SD ISIP 2468#, FG .75. BEG FRAC PUMP 84,812# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2860#, FG .79. X-OVER FOR W.L
1/14/2009	7:00 -	7:30	0.50	COMP	48		P		STG 3)PU 4 1/2, 8K BAKER CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7920' P/U PERF F/ 7888'-90', 4 SPF, 8 HOLES. 7848'-50', 4 SPF, 8 HOLES. 7798'-00', 4 SPF, 8 HOLES. 7750'-52', 4 SPF, 8 HOLES. 7700'-02', 4 SPF, 8 HOLES. POOH, X-OVER FOR FRAC CREW. OPEN WELL. 100#. BEG PUMP BRK @ 2706' @ 4.3 BPM. SD ISIP 2355#, FG .74. BEG FRAC PUMP 68,761# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2731#, FG .79. SWI. WINTERIZE WH. SDFN HSM

Operation Summary Report

23 GM, 36 HOLE SIZE. RIH SET CBP @ 7600 PERF F/ 7577-82', 4 SPF, 20 HOLES. 7398-03', 4 SPF, 20 HOLES. 7398-03', 4 SPF, 20 HOLES. POOH, X-OVER FOR FRAC CREW. OPEN W 170#, BEG PUMP, BRK @ 3925# @ 2.8 BPM. ISIP 1838#, FG, 68, BEG FRAC PUMP 79, 453 30/50 WHITE & TAIL IN W/ 5,000#, 20/40 TLC. ISIP 2679#, FG, 79, X-OVER FOR PW.L STG 5)PU4 1/2, 8K BAKER CBP & 3 3/8 EXP (23 GM, 36 HOLE SIZE. RIH SET CBP @ 6290 PERF F/ 6262-70', 4 SPF, 82 HOLES. 6030'-32', 4 SPF, 8 HOLES. POOH, X-OVER FOR FRAC CREW. OPEN W 0#, BEG PUMP, BRK @ 2123# @ 2.8 BPM. SI 1802#, FG, 73. BEG FRAC, PUMP 20,062#, 30 WHITE & TAIL IN W/ 5,000#, 20/40 TLC. SD IS 1968#, FG, 76. X-OVER FOR W.L. STG 6)PU4 1/2, 8K BAKER CBP & 3 3/8 EXP (23 GM, 36 HOLE SIZE. RIH SET CBP @ 5684 PERF F/ 5660'-67', 3 SPF, 21 HOLES. 5621'-24', 3 SPF, 21 HOLES. 5621'-24', 3 SPF, 12 HOLES. 5621'-24', 3 SPF, 12 HOLES. 5621'-24', 3 SPF, 12 HOLES. FOOH, X-OVER FOR FRAC CREW. OPEN W 0#, BEG PUMP, PUMP @ 3 BPM FOR 18 BBLS STABILZE PSI @ 522# SD, CALL CURTIS C/FOR DERICTIONS. DECIDED NOT TY FRAC STG 6. X-OVER FOR FOR STG 7)PU4 1/2, 8K BAKER CBP & 3 3/8 EXP (23 GM, 36 HOLE SIZE. 90 DEG PHASING R) STG 7)PU4 1/2, 8K BAKER CBP & 3 3/8 EXP (23 GM, 36 HOLE SIZE. 90 DEG PHASING R)		Operation Su	mary Report
Event: RECOMPLETION Start Date: 1/5/2009 End Date: 1/15/2009 Active Datum RKB @5,069.00ft (above Mean Sea UWI: 0/10/S/21/E/2/0/NWSW/6/PM/S/1,849.00/W/0/520.00/0/0 Date Time Duration (hr) Phase Code Subco D/U MD From Operation	Vell: NBU 1021-2L	Spud Conductor: 5/20/2008	Spud Date: 5/23/2008
Active Datum. RKB @5,069.00ft (above Mean Sea Level) Date Time Start-End (hr) Phase Code Subco de2 P/U MD From (ft) Open WELL 1500#. 7:30 - 18:00 10.50 COMP 36 B P OPEN WELL 1500#. STG 4)PL4 V2, 8K BAKER CBP & 3.3/8 EXP + 23 GM, 36 HOLE SIZE. RIH SET CBP @ 7600 PERF F/ 7577-82; 4 SPF, 20 HOLES. POOH, X-OVER FOR FRAC CREW. OPEN W 170#. BEG PUMP, BRK @ 3925# @ 2.8 BPM. ISIP 1839#, F0.68. BEG FRAC PUMP 79, 453 30/5 WHITE & TAIL IN WY 5,000#, 20/40 TLC ISIP 2679#, F6.79, X-OVER FOR WELL. STG 5)PU4 V/2, 8K BAKER CBP & 3.3/8 EXP + 23 GM, 36 HOLE SIZE. RIH SET CBP @ 6290 PERF F/ 6282-70; 4 SPF, 32 HOLES. POOH, X-OVER FOR FRAC CREW. OPEN W 0#. BEG PUMP, BRK @ 3123# @ 2.8 BPM. ST 800-4; 4 SPF, 32 HOLES. POOH, X-OVER FOR FRAC CREW. OPEN W 0#. BEG PUMP, BRK @ 3123# @ 2.8 BPM. ST 8024#, F6.76. X-OVER FOR W.L. STG 6)PU4 V/2, 8K BAKER CBP & 3.3/8 EXP + 23 GM, 36 HOLE SIZE. RIH SET CBP @ 5684 PERF F/ 6282-70; 4 SPF, 32 HOLES. STG 6)PU4 V/2, 8K BAKER CBP & 3.3/8 EXP + 23 GM, 36 HOLE SIZE. RIH SET CBP @ 5684 PERF F/ 6686-67; 3 SPF, 21 HOLES. SET CBP @ 5684 PERF F/ 10 LES. SET CBP W 3 SPF, 9 HOLES. SET CBP W 3	Project: UTAH	Site: UINTAH	Rig Name No: GWS 1/1
Date Time Start-End (hr) Phase Code Subco de2 P/U MD From (hr) OPEN WELL 1500#. 7:30 - 18:00 10:50 COMP 36 B P STG 4)PU4 1/2, 8K BAKER CBP & 3 3/8 EXP (23 GM, 36 HOLE SIZE, RIH SET CBP @ 7600 PERF F/ 7577-82', 4 SPF, 20 HOLES. 7388-03, 4 SPF, 20 HOLES. 7388-03, 4 SPF, 20 HOLES. 7388-03, 4 SPF, 20 HOLES. 7388-03, 4 SPF, 20 HOLES. 7388-03, 4 SPF, 20 HOLES. 7388-03, 4 SPF, 20 HOLES. 738-03, 4 SPF, 20 HOLES. 7398-03, 4 SPF, 20 HOLES. 739.50 WHITE & TAIL IN W. 5,000#, 20/40 TLC. ISIP 2679#, FG. 79, X-OVER FOR W.L. STG 5)PU4 1/2, 8K BAKER CBP & 3 3/8 EXP (23 GM, 36 HOLE SIZE, RIH SET CBP @ 6290 PERF F/ 6262-70, 4 SPF, 32 HOLES. 6030-32, 4 SPF, 8 HOLES. POOH, X-OVER FOR FRAC CREW. OPEN W. 0#, BEG PUMP, BRK @ 2123# @ 2.8 BPM. STG 1802#, FG. 73, BEG FRAC, PUMP 20,062#, 30 WHITE & TAIL IN W/ 5,000#, 20/40 TLC. SD IS 1802#, FG. 73, BEG FRAC, PUMP 20,062#, 30 WHITE & TAIL IN W/ 5,000#, 20/40 TLC. SD IS 1802#, FG. 73, BEG FRAC, PUMP 20,062#, 30 WHITE & TAIL IN W/ 5,000#, 20/40 TLC. SD IS 1802#, FG. 73, BEG FRAC, PUMP 20,062#, 35 WHITE & TAIL IN W/ 5,000#, 20/40 TLC. SD IS 1802#, FG. 73, SF, 9 HOLES. 5621-24/3 SFP, 21 HOLES. 5	Event: RECOMPLETION	Start Date: 1/5/2009	End Date: 1/15/2009
Start-End	O , , , , , , , , , , , , , , , , , , ,	Sea UWI: 0/10/S/21/E	0/NWSW/6/PM/S/1,849.00/W/0/520.00/0/0
7:30 - 18:00 10.50 COMP 36 B P OPEN WELL 1500# STG 4)PU4 172, 8K BAKER CBP & 3 3/8 EXP (23 GM), 3/6 HOLE SIZE. RIH SET CBP @ 7600 PERF F/ 777-82, 4 SPF, 20 HOLES. 7398-037, 4 SPF, 20 HOLES. 7398-037, 4 SPF, 20 HOLES. 7398-037, 4 SPF, 20 HOLES. 7398-037, 4 SPF, 20 HOLES. 7398-037, 4 SPF, 20 HOLES. 7398-037, 4 SPF, 20 HOLES. 7398-037, 4 SPF, 20 HOLES. 7398-037, 4 SPF, 20 HOLES. 7398-76, 79 X-OVER FOR WIL. STG 5)PU4 1/2, 8K BAKER CBP & 3 3/8 EXP (23 GM), 36 HOLE SIZE. RIH SET CBP @ 6290 PERF F/ 6262-707, 4 SPF, 3 HOLES. 6030-32, 4 SPF, 8 HOLE	1 1		
5242'-47', 4 SPF, 20 HOLES. 5196'-01', 4 SPF, 20 HOLES. POOH, X-OVER FOR FRAC CREW. OPEN W 0# BEG PUMP, BRK @ 1800# @ 1.7 BPM. SD 591#, FG. 55. BEG FRAC, PUMP 118, 144#, 30 WHITE & TAIL IN W/ 10,000#, 20/40 TLC. SD 1 2092#, FG. 84. (THIS STG ONLY CALLED FOR 69,504# OF SWE PUMPED 128,144# SAND. COMBINED ST & 7 SAND FOR STG # 7. AS DIRECTED BY CURTIS CAILE.) X-OVER FOR W.L PU 4 1/2, 8K BAKER CBP. SET CBP @ 5150'. POOH. RDMO CUTTERS WEATHERFORD FRAC SERV. BLEED OFF W ND FRAC VALVES, NUBOP. RU RIG FLOOR TBG EQUIP. PU 3 7/8 BIT + X-DART + POBS-			OPEN WELL 1500#. STG 4)PU 4 1/2, 8K BAKER CBP & 3 3/8 EXP GUN, 23 GM, 36 HOLE SIZE. RIH SET CBP @ 7600", P/U PERF F/ 7577"-82", 4 SPF, 20 HOLES. 7398-03", 4 SPF, 20 HOLES. POOH, X-OVER FOR FRAC CREW. OPEN WELL 170#. BEG PUMP, BRK @ 3925# @ 2.8 BPM. SD ISIP 1838#, FG. 68. BEG FRAC PUMP 79, 453#, 30/50 WHITE & TAIL IN W/ 5,000#, 20/40 TLC. SD ISIP 2679#, FG. 79, X-OVER FOR W.L. STG 5)PU 4 1/2, 8K BAKER CBP & 3 3/8 EXP GUN, 23 GM, 36 HOLE SIZE. RIH SET CBP @ 6290", P/U PERF F/ 6262"-70", 4 SPF, 32 HOLES. 6030"-32", 4 SPF, 8 HOLES. POOH, X-OVER FOR FRAC CREW. OPEN WELL 0#. BEG PUMP, BRK @ 2123# @ 2.8 BPM. SD ISIP 1802#, FG. 73. BEG FRAC, PUMP 20,062#; 30/50 WHITE & TAIL IN W/ 5,000#, 20/40 TLC. SD ISIP 1968#, FG. 76. X-OVER FOR W.L. STG 6)PU 4 1/2, 8K BAKER CBP & 3 3/8 EXP GUN, 23 GM, 36 HOLE SIZE. RIH SET CBP @ 5684", P/U PERF F/ 5660"-67", 3 SPF, 21 HOLES. 5621"-24", 3 SPF, 3 HOLES. 5621"-24", 3 SPF, 3 HOLES. 5621"-24", 3 SPF, 3 HOLES. 5621"-24", 3 SPF, 3 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 29 HOLES. 5621"-24", 3 SPF, 3 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 12 HOLES. 5621"-24", 3 SPF, 20 HOLES. 5621"-24", 3 SPF, 20 HOLES. 5621"-24", 3 SPF, 20 HOLES. 5621"-24", 3 SPF, 3 COMBINED RIBER SET CBP @ 5264", P/U PERF F/ 5242"-47", 4 SPF, 20 HOLES. 5621"-24", 4 SPF, 20 HOLE

2/5/2009 10:30:32AM

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Well: NBU 102					: 5/20/20	80	Spud Date: 5				
Project: UTAH			Site: Ull	NTAH				Rig Name No: GWS 1/1			
Event: RECO				ate: 1/5/2		1		End Date: 1/15/2009			
Active Datum: _evel)	RKB @5,069.00ft (above Mean	Sea			/E/2/0/N\	NSW/6/PM/S/ [^]	,849.00/W/0/520.00/0/0			
Date	Time Start-End	Duration (hr)	Phase	Code	Subco de2	P/U	MD From (ft)	Operation			
	7:30 - 18:00	10.50	COMP	44	С	Р		OPEN WELL 0#. BRK CONV CIRC, E CBP 1)TAG FILL @ 5145'=5' OF FILL DRL OUT CBP @ 5150' IN 10 MIN. 0 CONT RIH.	C/O SAND &		
								CBP 2)TAG FILL @ 5244'=20' FILL. C DRL OUT CBP @ 5264' IN 6 MIN. LC 10 BBLS, THEN REGIANED, CONT (RIH.	ST CIRC FOR		
								CBP 3)TAG NO SAND ON CBP, BEC NOT FRAC STG # 2. DRL OUT CBP MIN. 400 PSI INCR. CONT RIH.			
								CBP 4)TAG FILL @ 6270'=20' FILL. C DRL OUT CBP @ 6290' IN 8 MIN. 40 CONT RIH.			
								CBP 5)TAG FILL @ 7580'=20' FILL. () OUT CBP @ 7600' IN 9 MIN. 800 PSI RIH.			
								CBP 6)TAG FILL @ 7905'=15' FILL. C OUT CBP @ 7920' IN 8 MIN. 400 PSI RIH.			
								CBP 7)TAG FILL @ 8041'=15' FILL. (COUT CBP @ 8056' IN 7 MIN. 300 PSI RIH. TAG FILL 8284', C/O 12' FILL T/ THE PLUG @ 8296'. CIRC WELL W/ 20 B P/U RD DRL EQUIP. POOH LD EXE	INCR. CONT TOP OF FRAC BLS 2% KCL.		
								GOOD JTS OF 2 3/8, J-55 TBG. PU 4 HNGR & LAND TBG W/	1/16 TBG		
								KB	14.00		
								HNGR 250 JTS, 2 3/8,J-55 7: XN & SLIDE OPEN BS	.83 921.19 3.26		
								EOT 75	939.28		
								ND BOP, NU WH. DROP BALL. RIG PUMP BIT OFF W/ 20 BBLS 2% KCL BIT GO. OPEN WELL T/ PIT TURN V FBC. SICP 1100 PSI. FTP 50 PSI.	. DIDN'T SEE		
								250 JTS IN WELL. 28 GOOD JTS ON GROUND T/ DRL. PLUG @ LATER DATE. 3 BAD JTS HAULED T/ PRS. ALL JTS 2 3/8, J-55.	OUT FRAC		
1/16/2009	7:00 -			33	Α			7 AM FLBK REPORT: CP 1125#, TP CK, 56 BWPH, TRACE SAND, LIGHT TTL BBLS RECOVERED: 2740 BBLS LEFT TO RECOVER: 10967			
1/17/2009	7:00 -			33	Α			7 AM FLBK REPORT: CP 1425#, TP CK, 22 BWPH, TRACE SAND, LIGHT TTL BBLS RECOVERED: 3498 BBLS LEFT TO RECOVER: 10209			

2/5/2009 10:30:32AM 3

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•			O	perat	ion S	umm	ary Repor	t .
Well: NBU 102	1-2L		Spud Co	nductor	: 5/20/20	08	Spud Date: 5/	23/2008
Project: UTAH			Site: UIN	TAH				Rig Name No: GWS 1/1
Event: RECOM	1PLETION		Start Dat	e: 1/5/2	009		_ _	End Date: 1/15/2009
Active Datum: I Level)	RKB @5,069.00ft	(above Mean s	Sea	UWI: 0	/10/S/21/	E/2/0/N	WSW/6/PM/S/1	,849.00/W/0/520.00/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Subco de2	P/U	MD From (ft)	Operation
1/18/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2050#, TP 800#, 20/64" CK, 41 BWPH, TRACE SAND, LIGHT GAS TTL BBLS RECOVERED: 4603 BBLS LEFT TO RECOVER: 9104
1/19/2009	7:00 -			33	Α			7 AM FLBK REPORT: CP 2250#, TP 625#, 20/64" CK, 38 BWPH, TRACE SAND, LIGHT GAS TTL BBLS RECOVERED: 5594 BBLS LEFT TO RECOVER: 8113
1/20/2009	7:00 -			33	А			7 AM FLBK REPORT: CP 2175#, TP 525#, 20/64" CK, 28 BWPH, TRACE SAND, LIGHT GAS TTL BBLS RECOVERED: 6361 BBLS LEFT TO RECOVER: 7346
1/21/2009	7:00 -			33	Α			7 AM FLBK REPORT: CP 2150#, TP 450#, 20/64" CK, 24 BWPH, TRACE SAND, LIGHT GAS TTL BBLS RECOVERED: 6997 BBLS LEFT TO RECOVER: 6730
1/22/2009	7:00 -			33	Α			7 AM FLBK REPORT: CP 1900#, TP 500#, 20/64" CK, 27 BWPH, TRACE SAND, LIGHT GAS TTL BBLS RECOVERED: 7363 BBLS LEFT TO RECOVER: 6071
1/23/2009	9:00 -		PROD	_				WELL TURNED TO SALES @ 0900 HR ON 1/23/2009 - FTP 450#, CP 1900#, CK 18/64", 260 MCFD, 648 BWPD

MENDED REPORT	
highlight changes)	

FORM 8

				KIMENI										nanges)	APPRIAL A	LUADED.
		L	ΣIVIS	ION OF	- OIL,	GAS	AND	MININ	G				.EASE DES ML-226	IGNATION AND	SERIAL N	UMBER:
WEL	L CON	1PLET	ION	OR F	RECC	MPL	ETIC	ON RI	EPOR	T ANI	DLOG	6. 1	F INDIAN, A	ALLOTTEE OR	TRIBE NAM	ΙE
1a. TYPE OF WELI	L.	OI W	ELL C		BAS VELL	7	DRY		OTHE	R				AGREEMENT N		
b. TYPE OF WOR	NZ.													E and NUMBER		
NEW WELL	HORIZ LATS.	DE	EEP-] F	RE- INTRY		DIFF. RESVR.	Z	OTHE	R REC	COMPLETION			021-2L		
2. NAME OF OPER KERR MC		L & GA	S ON	ISHOR	E LP								43047			
3. ADDRESS OF O								0.44	370		NUMBER:	10 F		POOL, OR WIL		
1368 S 120			TY VE	ERNAL		STATE	: 01	ZIP 840	310	(43	35) 781-7024	- 11				ANO5
4. LOCATION OF V AT SURFACE:			'FWL										MERIDIAN WSW	SECTION, TOV 2 10S	31E	ANGE,
AT TOP PRODU	JCING INTER	VAL REPOF	RTED BE	ELOW:												
AT TOTAL DEP	TH:											1.000	COUNTY JINTAI	Н	13. STA	UTAH
14. DATE SPUDDE 5/20/2008	D.	15. DATE T		CHED:		E COMPL 2/2009		,	ABANDONE	D .	READY TO PRODU	CE 🖊		ATIONS (DF, R	KB, RT, GL):
18. TOTAL DEPTH	: MD 9.4	480		19. PLUG	BACK T.E	D., MD	8,284		20. IF M	ULTIPLE C	OMPLETIONS, HOW	MANY? *			MD	
	TVD					TVD							PLI	JG SET:	TVD	
22. TYPE ELECTRI	IC AND OTHE	R MECHAN	ICAL LO	OGS RUN (S	Submit cop	py of each	1)			23.	a to book have a control at					
N/A										WAS DST		NO	☑ Y	=	Submit analy Submit repo	
										DIRECTIO	NAL SURVEY?	NO	✓ Y	ES (S	Submit copy)
24. CASING AND L	INER RECOF	RD (Report a	all string	gs set in we	oll)											
HOLE SIZE	SIZE/GR	ADE	WEIGH	EIGHT (#/IL.) TOP (MD) BOTTOM (MD) STAGE CEMENTER CEMENT TYPE (NO. OF SACKS									RRY IE (BBL)	CEMENT TOP	** AMC	OUNT PULLED
20"	14"	STL	36	.7#			4	0			28					
12 1/4"	9 5/8	J-55	36	3#			2,	250			750					
7 7/8"	4 1/2	I-80	11	.6#			9,	480			1590					
				-			-	_								
		-	_			-									-	
25. TUBING RECO	RD						-					-				
SIZE	DEPTH	SET (MD)	PAC	KER SET (A	MD)	SIZE	7	DEPTH	SET (MD)	PACKE	R SET (MD)	SIZE	D	EPTH SET (MD)) PACK	ER SET (MD)
2 3/8"	7,	939														
26. PRODUCING IN	NTERVALS								- 2	7. PERFO	RATION RECORD					
FORMATION	NAME	TOP	(MD)	вотто	M (MD)	TOP	(TVD)	вотто	M (TVD)	INTERVA	L (Top/Bot - MD)	SIZE	NO. HOL	ES PER	FORATION	STATUS
(A) WASATC	CH	5,1	196	6,2	270					5,196	6,270	0.36	80	Open 🗸	Squee	zed
(B) MESAVE	RDE	7,3	398	8,2	278					7,398	8,278	0.36	160	Open 🗸	Squee	zed
(C)														Open	Squee	zed
(D)														Open	Squee	zed
28. ACID, FRACTU	RE, TREATM	ENT, CEME	NT SQU	JEEZE, ETO).											
DEPTH	INTERVAL								AMO	UNT AND T	YPE OF MATERIAL					
5196'-6270'			PM	P 3436	BBLS	SLIC	K H2	O & 15	3,206#	30/50	OTTOWA SE)				
7398'-8278'			PM	P 10,27	71 BB	LS SL	ICK H	20 &	369,264	1# 30/5	0 OTTOWA	SD				
29. ENCLOSED AT	TACHMENTS	S:					_							30. V	VELL STAT	US:
_										F		_				
	RICAL/MECH			D CEMENT	VERIFIC	ATION		GEOLOG CORE AN	IC REPORT IALYSIS		DST REPORT	DIREC	RE		PR	DD
													MA	R 0 2 28	na	r.
													8 × 8 / 14 E	1 U L / E	U.J	

31. INITIAL PRODUCTION INTERVAL A (As shown in item #26) OIL - BBL: WATER - BBL: PROD. METHOD: DATE FIRST PRODUCED TEST DATE: HOURS TESTED: TEST PRODUCTION GAS - MCF RATES: 916 0 340 **FLOWING** 1/22/2009 2/13/2009 24 CHOKE SIZE: TBG. PRESS. CSG. PRESS. 24 HR PRODUCTION OIL - BBL GAS - MCF WATER - BBL: INTERVAL STATUS: API GRAVITY BTU - GAS GAS/OIL RATIO RATES: 916 340 **PROD** 24/64 565 1,096 0 INTERVAL B (As shown in item #26) GAS - MCF: WATER -- BBL: PROD METHOD: DATE FIRST PRODUCED: TEST DATE: HOURS TESTED: TEST PRODUCTION | OIL - BBL: RATES: 916 340 **FLOWING** 1/22/2009 2/13/2009 n CHOKE SIZE: TBG. PRESS. CSG PRESS API GRAVITY BTU - GAS GAS/OIL RATIO 24 HR PRODUCTION OIL - BBL: GAS - MCF WATER - BBL INTERVAL STATUS RATES: **PROD** 24/64 565 1,096 0 916 340 INTERVAL C (As shown in item #26) DATE FIRST PRODUCED TEST DATE: HOURS TESTED: TEST PRODUCTION OIL - BBL GAS - MCF: WATER ~ BBL: PROD. METHOD: WATER - BBL: INTERVAL STATUS: CHOKE SIZE TRG. PRESS CSG. PRESS. API GRAVITY 24 HR PRODUCTION OIL - BBL: GAS - MCF: BTU - GAS GAS/OIL RATIO RATES: INTERVAL D (As shown in item #26) DATE FIRST PRODUCED: TEST DATE: HOURS TESTED: TEST PRODUCTION OIL - BBL: GAS - MCF: WATER - BBL: PROD. METHOD: RATES: INTERVAL STATUS: CHOKE SIZE: 24 HR PRODUCTION OIL - BBL: GAS - MCF WATER - BBI TBG. PRESS. CSG. PRESS. API GRAVITY BTU - GAS GAS/OIL RATIO RATES: 32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.) SOLD 33. SUMMARY OF POROUS ZONES (Include Aquifers): 34. FORMATION (Log) MARKERS: Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
GREEN RIVER MAHOGANY WASATCH MESAVERDE	1,347 2,093 5,194 7,349	7,337 9,392			

35. ADDITIONAL REMARKS (Include plugging procedure)

36.	I hereby certify	that the fo	pregoing and a	attached inform	ation is comp	lete and correct	t as determined	from all available	records.

NAME (PLEASE PRINT) SHEILA UPCHEGO

TITLE REGULATORY ANALYST

SIGNATURE

DATE 2/25/2009

This report must be submitted within 30 days of

- completing or plugging a new well
- · drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests
- * ITEM 20: Show the number of completions if production is measured separately from two or more formations.
- ** ITEM 24: Cement Top Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to:

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Salt Lake City, Utah 84114-5801

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